

Recreation Research Program

Methodology for Recreation Data Acquisition and Evaluation for Ethnic Minority Visitors to Corps of Engineers Projects

by Robert A. Dunn, David M. Quebedeaux

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Contents

D C	
Preface	V
1—Introduction	1
Purpose	1
Background	3
2—Socioeconomic Context of Ethnic Diversity	5
Profiles of Four Ethnic Groups	5
Native Americans	6
African Americans	9
	13
	16
3—Identification of Baseline Information	20
Known Preferences for Recreation Activities	20
	20
	25
	30
	38
	40
	40
	43
	44
4—Identification of Appropriate Methods for Data Acquisition	47
Previous Ethnicity Research by Federal Agencies	47
· · · · · · · · · · · · · · · · · · ·	47
	48
	48
	49
	49
	50
	50
	50 50

Relevance	51
The Oklahoma Native American Focus Groups	52
The Anadarko Meeting Notes	53
The South Dakota Native American Focus Groups	62
The Swift Bird Meeting Notes	62
Development Of The Draft Survey Instrument	67
Initial Questions	67
The Pretest Focus Groups	70
OMB Revisions and Approval	71
5—Results of the 1999 Testing of the Survey Instrument	74
African Americans (Tables AF 1-22)	81
Hispanic Americans (Tables HS 1-22)	92
Asian Americans (Tables AS 1-22)	103
Discussion of Test Results	110
Recommendations for Background Information	111
Recommendations on Questions Used	113
6—Guidelines and Recommendations for Project Managers	118
Focus Groups	118
Participants in a Focus Group	119
Other Factors to Consider	122
Surveys	125
The Issue of Group-Specific Questions	125
Major Themes and Sample Questions	125
Community Outreach Efforts	129
Identify source areas for minority visitation to	129
Corps projects	129
Work with community leaders and minority	130
development groups in these source areas	130
Work with social welfare agencies in source areas	150
7—Summary and Conclusions	131
Looking BackLooking Forward	131
Methodological Complementarity	133
Need for Future Research	134
References	137
Appendix A—OMB-Approved Survey Instrument	A1
Appendix B—Data Sources for Socioeconomic Profiles	B1
SF 298	

Preface

The work reported herein was initially undertaken as part of the Recreation Research Program (RRP) under Ethnic Culture and Corps Recreation Participation, Work Unit 32992. The RRP was sponsored by Headquarters, U.S. Army Corps of Engineers (HQUSACE) and assigned to the U.S. Army Engineer Research and Development Center (ERDC) under the purview of the Environmental Laboratory (EL). Mr. Jim Henderson, EL, served as principal investigator of the work unit until March 1997. Mr. Robert Dunn, EL, has served as principal investigator since that time.

Sponsorship of the research was transferred to the Recreation Management Support Program (RMSP) in October 1998 (FY99). The RMSP is funded by the O&M General Appropriation and encompasses activities previously conducted through the RRP and the Natural Resources Technical Support Program. ERDC provides program management support for execution of approved RMSP activities. The RMSP is managed at ERDC by Dr. David Tazik, EL.

This report documents a test survey of ethnic minority visitors to five Corps of Engineers lakes during the spring and summer of 1999. The primary purpose of the survey was to obtain baseline information on the outdoor recreation style and preferences of three ethnic minority groups (African, Hispanic, and Asian Americans) and their experiences and perceptions at Corps of Engineers (CE) projects. A secondary purpose of the survey was to test the draft survey instrument against results obtained in four focus group interviews conducted in 1998 at the same group of CE projects. The population surveyed in 1999 included African Americans at Woodruff Lake, AL, and Carlyle Lake, IL; Hispanic Americans at Canyon Lake, TX, and Pine Flat Lake, CA; and Asian Americans at Hensley Lake, CA, and Pine Flat Lake, CA. The survey was conducted from May 15 to July 30, 1999. While Native Americans were excluded from this survey, the report also contains discussion of the six focus groups which were conducted during the summer of 1997 with fifteen Native American tribes located in the Corps' Tulsa and Omaha Districts.

The authors wish to express their deep appreciation to project managers Edward (Ike) Lyon (Woodruff Lake, AL), Robert Wilkins (Carlyle Lake, IL), Jerry Brite (Canyon Lake, TX), Charles Parnell (Pine Flat Lake, CA) and Edward Armbruster (Hensley Lake, CA), who were responsible for the

successful administration of the survey in 1999 and provided outstanding logistical support for the focus groups conducted in 1998. Special thanks are also given to the rangers and contract students who worked so hard to complete the survey during the summer of 1999: Myers Hawkins, Shane Peltes, Dave Quebedeaux, Carrie Pratt, Frank Fonseca, and Laura Beauregard. Mr. Asachang Lee, contract student from Cal State-Fresno, served as the Asian language translator working with the ranger staffs at Pine Flat and Hensley Lakes. His participation was jointly funded by the Sacramento District and the Ethnic Culture work unit.

Mr. Dunn developed the survey instrument and pretested the questions during the 1998 focus groups. In 1999 he was assisted by Mr. David Quebedeaux, ranger from Canyon Lake, TX, in making final modifications of the Office of Management and Budget approved survey instrument. Mr. Quebedeaux also provided outstanding technical support in the compilation of the survey results during the final weeks of report preparation. He also served as a liaison with the two California projects.

A Recreation Leadership Advisory Team provides oversight for the RMSP. The Team has representatives from each MSC/Regional Office within the Corps of Engineers. In addition, four district offices and four project offices are represented. Dr. Michael Loesch, Team representative from the Great Lakes and Ohio River Division, and Mr. Phil Turner, Team representative from the South Pacific Division, served as proponents for this work unit.

This report was prepared by Mr. Robert Dunn with assistance from Mr. David Quebedeaux, under the general supervision of Dr. H. Roger Hamilton, Chief, Resource Analysis Branch (RAB); Dr. David Tazik, Chief, Natural Resources Division; and Dr. John Keeley, Acting Director, EL.

At the time of publication of this report, Acting Director of ERDC was Dr. Edward Link; ERDC Commander was COL Robin R. Cababa, EN.

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1 Introduction

Purpose

Since 1995 the Environmental Laboratory at the U.S. Army Engineer Research and Development Center (ERDC) has conducted research for Headquarters, U.S. Army Corps of Engineers (USACE) on the existing and future use of Corps of Engineers (CE) operating projects by the four major ethnic minority groups studied by the U.S. Bureau of the Census. These groups include Native Americans, African Americans, Asian Americans, and Hispanic Americans. This research effort represents an initial response by USACE to Executive Order 12862: Setting Customer Service Standards, and Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

The overall objective of this research has been to gather information regarding ethnic group use of Corps projects for use in project planning and operations decision making. The specific objectives have been to (1) compare present Corps users to general population proportions, (2) identify relevant Corps and other agency information, policies, and studies on ethnic and non-traditional use of Corps projects, (3) determine existing and future ethnic group use of Corps projects and determine recreation preferences and needs, (4) evaluate existing and future needs of ethnic groups, and (5) provide a summary of findings with guidance incorporating considerations of ethnic users in planning and operations decisions. These objectives have been met partially through the publication of four Tech Notes on Ethnic Minority Recreation and now completely with the publication of this technical report.

The 1995 Plan of Study for the ERDC work unit entitled "Ethnic Culture and Corps Recreation Participation" set forth as one of the primary research goals the development of a methodology for data acquisition and evaluation of minority recreation information. As conceptualized by the Plan of Study committee members, this developed methodology could be used by Corps projects or districts in the future to obtain information about ethnic minority recreation. The methodology was to be created around a

core set of questions which should be responsive to the values and experiences of the ethnic group of interest.

To accomplish the goal of a developed methodology, the Plan of Study called for two major actions: (1) Identify Information Requirements; and (2) Identify Appropriate Methods for Data Acquisition. The present report is structured around these two tasks. The first task includes the identification of general issues, questions, and information needed for each ethnic group. The core questions should elicit information on such things as preferences for recreation activities, motivations, and values for recreation and preference and importance of various facility and natural resource attributes. Information on how recreation use has changed or is changing could also be obtained for use in projecting minority recreation trends. The second task is to determine the best method of acquiring this data. Plan of Study committee members felt that after information requirements for an ethnic group are identified, the important question becomes, "What is the best way to obtain this information?" They recognized that based on past experiences some ethnic groups did not respond favorably to some survey techniques or produced biased responses. Some issues discussed in the 1995 Plan of Study Workshop included the negative responses of minority visitors to government authority (uniforms, badges), language barriers, and level of identification minority visitors had with the surveyor or interviewer.

The Plan of Study called for the pretest, revision, and implementation of a survey instrument comprised of a series of core questions. This report presents the results of these three actions. Secondly, the Plan of Study called for the concise summary of information on minority recreation at Corps projects to serve as a reference for developing future plans for surveys. This summary was to be built on existing recreation literature and the Corps' (and other agencies') experiences with minority groups. To this end, the present report synopsizes detailed information on minority recreation at Corps projects contained in the major literature review for the work unit (Gramann 1996), the four Tech Notes produced for the Ethnic Culture work unit, a new review of pertinent demographic data, and pertinent information from the USDA Forest Service's permanent Research Program on ethnicity.

In summary, this research attempts to address two key questions. First, what does the CE need to know about the ethnic minority groups that visit its operating projects? Second, what is the best way to acquire this information?

Background

Initial work for the Ethnic Culture work unit was begun in 1995 during which an extensive literature review was conducted by Dr. James Gramann of Texas A&M and a Plan of Study Committee meeting was held in Dallas, TX, under the leadership of Mr. Jim Henderson, who served as principal investigator until March 1997. No funding for the work unit was received in FY96. In 1997 the current principal investigator conducted six focus groups with fifteen Native American tribes in the Corps' Tulsa and Omaha Districts. He was assisted in this effort by Planning and Management Consultants, Ltd., of Carbondale, IL. In the spring of 1998, extensive fieldwork at five Corps projects across the United States was conducted to study first-hand the outdoor recreational habits and preferences of African-, Hispanic-, and Asian-Americans. This fieldwork included interviews with Corps project personnel and minority visitors, ethnographic observation of visitor recreational behavior, and a series of focus groups with ethnic minority visitors.

Since 1997 focus group meetings have been conducted with the following four minority groups:

Minority Group	Location
Native Americans	Tulsa District: Muskogee, OK - BIA Office Pawnee, OK - Pawnee Tribal Headquarters Anadarko, OK - BIA Agency Office
	Omaha District: Pierre, SD - Lake Oahe Ft. Thompson, SD Cheyenne River Sioux Reservation - Lake Oahe
African Americans	Mobile District: Woodruff Lake, AL
	St. Louis District Carlyle Lake, IL
Asian Americans	Sacramento District: Hensley Lake, CA
Hispanic Americans	Ft. Worth District: Canyon Lake, TX

The following research products have been produced to date:

- a. Gramann, James. (1996). "Ethnicity, Race, and Outdoor Recreation: A Review of Trends, Policy, and Research," WES Miscellaneous Paper R-96-1.
- b. Dunn, Robert A. (1997). "Native American Focus Groups," RECNOTES Vol. R-97-2, U.S. Army Corps of Engineers Recreation Research Program, September 1997.

- c. Dunn, Robert A. (1997). "Native American Recreation at Corps Projects." Paper presented at the Northern Plains Federal Interagency Conference on Traditional Native American Issues, Rapid City, SD, Sept. 29-30, 1997.
- d. Dunn, Robert A., and T. D. Feather. (1998). "Native American Recreation at Corps Projects: Results of Six Focus Groups," Natural Resources Technical Note REC-09.
- e. Dunn, Robert A. (1998). "African-American Recreation at Two Corps of Engineers Projects: A Preliminary Assessment," Natural Resources Technical Note REC-10.
- f. Dunn, Robert A. (1999). (In Publication). "Asian-American Recreation at Two Corps Lakes in California: A Hmong Case Study," Natural Resources Technical Note.
- g. Dunn, Robert A. (In Publication). "Hispanic-American Recreation at Two Corps Lakes In California and Texas: A Preliminary Assessment," Natural Resources Technical Note.
- h. Five videotapes of interviews conducted at projects visited in 1998: Woodruff Lake (AL), Carlyle Lake (IL), Canyon Lake (TX), Hensley Lake (CA), and Pine Flat Lake (CA). The videotapes provide excellent evidence of minority recreational use of the recreation facilities at these projects.

Chapter 1 Introduction

2 Socioeconomic Context of Ethnic Diversity

Profiles of Four Ethnic Groups

To fully understand the following discussion on ethnic minority recreation, it is necessary to have a socioeconomic context for each of the four minority groups under consideration. Much of the pertinent socioeconomic data has been accumulated by the U.S. Bureau of the Census, the Bureau of Labor Statistics, and other agencies. Finding and interpreting all this data is a formidable challenge. The tremendous diversity and complexity of the data which has been collected on ethnic minorities make it extremely difficult to see the "big picture" in attempting to describe their respective group identities. It is truly a case of "you can't see the forest because of the trees."

A most useful compilation of minority demographic data has recently been prepared by Russell (1998). For each of the four ethnic groups considered here, she presents the most pertinent survey data and statistical tables. Relying primarily on U.S. Bureau of the Census data, and to a lesser degree on other sources (e.g., National Centers for Health and Education statistics) she has also prepared an accurate and objective profile of each of the four minority groups. The discussion which follows synopsizes Russell's (1998) much lengthier treatment and includes demographic data from her primary source tables and charts. Selected tables from Russell (1998) showing pertinent socioeconomic data for each of the four ethnic groups appear in Appendix B. Figure 1 shows the current proportion (73 percent) and projected decline (to 64 percent) by 2020 of non-Hispanic whites in the total American population. Figures 2 and 3 show the current sizes and projected population growth for the four ethnic minority groups discussed here.

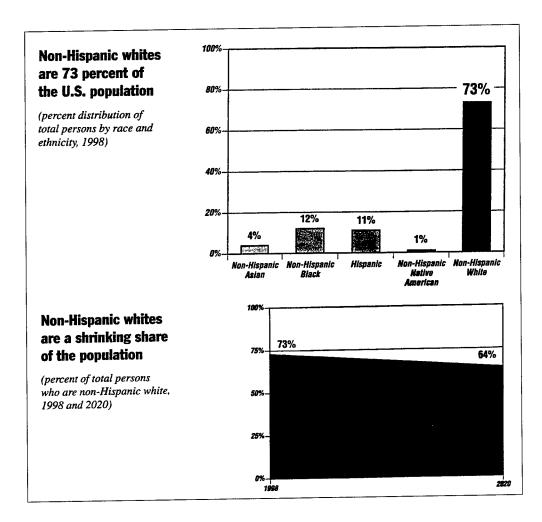


Figure 1. Demographic trends among non-Hispanic whites

Native Americans

Population: Native Americans are the smallest racial minority in the United States, accounting for just 0.9 percent of the total U.S. population. The Native American population in 1998 was approximately 2.3 million. The number of Native Americans is expected to rise to 3.1 million by 2020, when their share of the population will reach 1.0 percent. The largest tribe, the Cherokee, accounts for 19 percent of all Native Americans. Although the Native American population is growing faster than the total U.S. population, the Native American share of the population is not projected to rise much because they number so few.

Nearly half of all Native Americans live in the West, and another 30 percent in the South. Each of three states was home to more than 10 percent of the nation's Native Americans in 1995: Arizona (10.9 percent), California (13.4 percent), and Oklahoma (11.8 percent). Native Americans account for 15 percent of Alaska's population, the largest share among the 50 states.

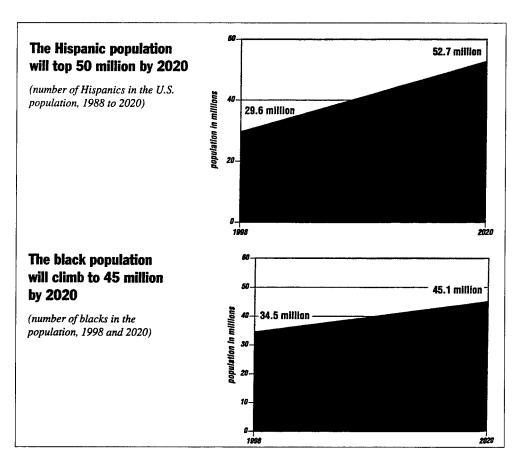


Figure 2. Demographic trends among Hispanic and African American populations (Russell 1998)

Education: While the majority of Native Americans are high school graduates, their educational attainment, which varies greatly by tribe, is far below that of the average American. While only 9 percent of Native Americans aged 5 or older do not speak English "very well," this figure rises to 33 percent among the Navajo and 31 percent among the Yaqui. In 1990, 66 percent of Native Americans were high school graduates, versus 78 percent of the total U.S. population. However, in some tribes, such as the Osage, young people are more likely to be high school graduates than the average American. Widespread poverty among Native Americans as a group makes it difficult for them to afford a college education. According to the 1990 census, only 9 percent of Native Americans were college graduates, less than half the share of all Americans. Until their economic status improves, the educational attainment of Native Americans will remain below average (Russell 1998).

Health: On many measures, the health of Native Americans is better than that of the average American. They are less likely to die from lung cancer, breast cancer, and cardiovascular diseases, and AIDS is relatively rare among this population segment. But Native Americans are twice as likely to die in motor vehicle accidents. Teen births are common among

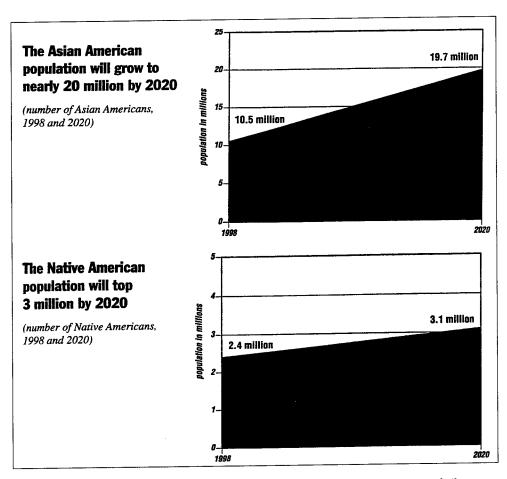


Figure 3. Demographic trends among Asian and Native American populations (Russell 1998)

Native Americans, with 9 percent of all births occurring to girls aged 10 to 17—64 percent higher than the proportion for the total U.S. population. Because many Native Americans live outside urban metropolitan areas, only 20 percent live in counties with polluted air. Because cancer and heart disease are less common among Native Americans than among the total population, their life expectancy at age 65 exceeds that of the average American. Native American men aged 65 can expect to live 18 more years, two years longer than the average 65-year-old man. Native American women aged 65 can expect to live 23 more years, three years longer than the average 65-year-old woman. In general, many of the health problems of Native Americans are common in populations where poverty is widespread. These include tuberculosis, disability, and teen pregnancy.

Households: Married couples make up a smaller share of Native American households (49 percent) than of all U.S. households (55 percent), while female-headed families are a larger share (20 percent compared to the U.S. total of 12 percent). Russell (1998) notes that the large share of families headed by women without a spouse contributes to the high poverty rate among Native Americans.

Native American households are larger than average and more likely to include children. Among Native American couples, a 58 percent majority have children under age 18 at home. This compares with fewer than half of couples nationally. Fifty-five percent of Native American households are home to three or more people (Russell 1998).

Housing: Native Americans are more likely to live in nonmetropolitan areas than any other racial or ethnic group. Because homes are less expensive in nonmetropolitan areas, the Native American home ownership rate is higher than that of both blacks and Hispanics. Still, only 48 percent of Native Americans owned their home in 1995, a much smaller share than the 65 percent home ownership rate among all Americans. This rate reaches 60 percent for Native Americans in the Northeast and 54 percent for those in the South.

Income: 30 percent of Native Americans are poor, and poverty is greatest among those under age 18. As with education, poverty rates vary greatly by tribe. The median income of Native American households is far below the national median, at \$19,900 in 1989 versus \$30,056 nationally. The large share of female-headed families among Native American households accounts for the low incomes of this ethnic minority group. Nearly half the Native American female-headed families had incomes below \$10,000 in 1989. In contrast, most Native American married couples had incomes of \$25,000 or more.

Labor Force: Native Americans are underrepresented in executive and managerial occupations because they are much less educated than the average American. More than 40 percent of Native American workers can be found in three occupations: precision production, craft, and repair (14 percent); administrative support (15 percent); and service occupations (16 percent). Nearly two-thirds of Native American households headed by married couples have two or more workers. Among the many Native American female-headed families, 27 percent have no earners, and 48 percent have only one earner, which explains their low incomes. There are no spending or wealth data for Native Americans in the 1990 census data (Russell 1998).

African Americans

Population: America's black population is projected to grow from about 35 million in 1998 to 45 million in 2020, when blacks will comprise 14 percent of the total population. African Americans will remain the largest minority in the U.S. until 2009, when Hispanics will finally outnumber them, according to the projections of the U.S. Census Bureau. Blacks account for a larger share of children and young adults than of older American because black fertility and mortality are above average. While only 7.5 percent of people aged 85 or older are black, fully 16 percent of children under age 5 are black (Russell 1998).

More than half of the U.S. black population live in the South, where they account for 19 percent of the total population. In Mississippi, 36 percent of the state's population is black, as is at least 30 percent of the population of Louisiana and South Carolina. No single state is home to more than 10 percent of the black population. Unlike Hispanics or Asians, most of whom are concentrated in only a few states, African Americans are an important segment of the population throughout the country. Among metropolitan areas, New York has the largest number of blacks, over 3.4 million in 1990 (18 percent). Overall, there are 51 metropolitan areas with more than 100,000 blacks. Among them, the black share of the population is highest in Jackson, MS, at 42.5 percent.

Education: Blacks are gaining on whites in educational attainment. Seventy-four percent of blacks aged 25 or older are high school graduates. While this figure is 9 percentage points lower than the share of the total population with a high school diploma, consider that as recently as 1980 barely half of blacks had graduated from high school. The surge in educational attainment is due to the greatly improved education level of younger blacks. Among blacks aged 25 to 39, from 84 to 87 percent are high school graduates.

Fourteen percent of blacks aged 25 or older had a bachelor's degree in 1996, compared with 24 percent of the total U.S. population. Among black families with children aged 18 to 24, 29 percent have a child in college full time. This proportion rises to 52 percent among black families with incomes of \$75,000 or more. Nearly 2 million blacks were in college in 1995, 39 percent of them full-time students in four-year schools. Blacks earned 7.3 percent of all bachelor's degrees, 6 percent of all master's degrees, and 4 percent of doctorates awarded in the U.S. in 1994-95. Blacks earned 8 percent of first-professional degrees in theology and 10 percent of those in pharmacy. Russell (1998) notes that the proportion of black Americans with a college education is likely to surge in the next decade, thanks to changes in the tax code which make it easier for lowand middle-income families to afford college tuition.

Health: While blacks have made significant gains in income and education over the past few decades, their health status has not kept up. Behind the lower life expectancy of blacks are much higher than average rates of infant mortality and homicide. Heart disease, cancer, and cerebrovascular disease are the three leading killers of blacks, just as they are for the U.S. population as a whole. But AIDS ranks fourth as a cause of death among blacks, while it is the eighth leading cause of death nationally. Blacks' life expectancy is well below average. The disability rate among blacks is about average, at 26 percent for blacks aged 15 or older in 1994-95. This compares with a disability rate of 24 percent for the total population.

Just under 600,000 babies were born to black women in 1996, accounting for 15 percent of all babies born that year. Fully 70 percent of black babies are born to unmarried women, the highest proportion among all racial and ethnic groups (Russell 1998).

Households: Female-headed families are the dominant household type among blacks, accounting for 33 percent of all black households. Only 32 percent of black households are married couples. Nuclear families (married couples with children) represent just 18 percent of black households, while female-headed families with children are a larger 25 percent. Only 37 percent of black children live with both parents. A 58-percent majority live with only their mother. Among black children under age 6, fully 46 percent live with a never-married mother (Russell 1998).

Only 38 percent of black women are currently married, versus 56 percent of women in the nation as a whole. The proportion of black women who are married rises above 50 percent only among those aged 35 to 64, well below the percentage for the total population of American women. Russell (1998) notes that the living arrangements of black Americans directly affect their incomes. Because so many black households are female-headed families, the poorest household type, the income of black households is well below average. Black Americans will not close this gap until household composition is similar to the average.

Housing: Forty-four percent of America's 12 million black householders own their own home. This compares with a home ownership rate of 65 percent for all Americans. Most black households are in the South (54 percent) with the Midwest (19 percent), Northeast (18 percent), and West (9 percent) trailing significantly behind. Among the 50 metropolitan areas with the most black households, New York has the largest number—over 700,000 in 1990. Blacks account for the largest share of households, 37 percent, in Jacksonville, FL.

When surveyed in 1995 by the American Housing Survey, most black householders were satisfied with their homes. On a scale of 1 to 10, with 1 being the worst and 10 the best, 65 percent of blacks rated their homes an 8 or higher. Even among black renters, 56 percent rate their homes at least an 8. Few blacks think their neighborhood has a crime problem. Only 10 percent of homeowners and 17 percent of renters say crime is a problem in their area. Fully 57 percent of black householders say their neighborhood has no problems (Russell 1998).

Nineteen percent of blacks moved between 1995 and 1996, versus 16 percent of the total U.S. population. The most common reason for moving among blacks was to establish their own household. The overall low rate of home ownership among blacks can best be explained by the composition of black households. Because so many black households are female-headed families, which are among the least likely to own a home, black home ownership is well below average (Russell 1998).

Income: Black Americans' incomes are growing as blacks make gains in education that lead to better jobs. The median income of black households rose 5 percent between 1990 and 1996, to \$23,482 after adjusting for inflation. This was the largest increase among all racial and ethnic groups. Since 1990, the median household income of blacks has grown 14 percent.

Despite these impressive gains, median household income for blacks stood at just 60 percent of the median for all households in 1996. This is because just 32 percent of all black households are married couples, typically the most affluent household type. Black couples had a median income of \$42,069 in 1996, while the slightly more numerous black female-headed families had a median income of just \$16, 256.

For black men and women, incomes peak in the 45-to-54 age group. Black men who work full-time had a median income of \$27,136 in 1996, while their female counterparts had a median income of \$21,990. The earnings of blacks rise steadily with education. Black men with at least a bachelor's degree who work full time earned a median income of \$36,001, while similarly educated black women earned \$29,806.

Black families are more likely to be poor than the average American family, but the percentage of blacks in poverty fell from 31 percent in the early 1990s to 26 percent in 1996. In general, black Americans should continue to see income gains in the future as more receive a college education. But the household income of blacks will remain far below average as long as female-headed families remain the dominant household type (Russell 1998).

Labor Force: Younger, better-educated blacks are gradually moving into high-paying white-collar occupations, but it will take many decades until this progress is reflected in the labor force statistics for black workers as a whole.

Sixty-eight percent of black men and 62 percent of black women were in America's labor force in 1997. The labor force participation of black men is below the 75 percent rate for all men, while the rate for black women is slightly higher than average. Twenty percent of black workers are in managerial or professional specialty jobs, accounting for 7 percent of all Americans employed in those occupations. The largest share of blacks (29 percent) are employed in technical, sales, or administrative support jobs.

In 58 percent of black couples, both husband and wife are in the labor force. However, only 37 percent of black households have two or more earners, well below the national average of 45 percent. A smaller-than-average share of black households have two or more earners because relatively few are headed by married couples.

Between 1996 and 2006, the number of black workers will grow 14 percent. The black share of the labor force will rise only slightly during those years, from 11.3 to 11.6 percent (Russell 1998).

Hispanic Americans

Population: The Hispanic American population is projected to grow from nearly 30 million in 1998 to more than 52 million by 2020, when they will account for 16 percent of the total U.S. population. Although the Hispanic population is the fastest growing of all ethnic minorities, they will not surpass the number of African Americans in the U.S. until 2009. America's Hispanic population is strongly regionalized. They constitute a powerful segment of the population in two of the most populous states in the U.S., California, and Texas, but make up only a tiny share of the population in many other states and regions.

Among Hispanics, the three largest ethnic groups are Mexican (63 percent), Puerto Rican (11 percent), and Cuban (4 percent). Hispanics are most likely to live in the West (45 percent) and South (31 percent). Fifty-eight percent of Mexican Americans live in the West, while 69 percent of Puerto Ricans live in the Northeast, and 71 percent of Cubans live in the South. Hispanics account for 26 percent of California's population, and Los Angeles is home to more Hispanics than any other metropolitan area in the U.S. (Russell 1998).

Russell (1998) notes that Hispanic women have the highest fertility rate of any ethnic or racial group. This is reflected in the fact that a much larger share of children and young adults are Hispanic than of older Americans. Sixteen percent of all American children are Hispanic, versus only 4 percent of people aged 85 or older.

Education: Hispanics are much less educated than the average American because many are immigrants who came to the United States as adults with few years of schooling. Only 53 percent of Hispanics had a high school diploma in 1996, versus 82 percent of the total population. The proportion of Hispanics with a high school diploma ranges from 47 percent of Mexican Americans to 66 percent of "other" Hispanics (Russell 1998).

Only 9 percent of Hispanics have a college degree, versus 24 percent of the total population. More than 1 million Hispanics were enrolled in college in 1995, 36 percent of them as full-time students in four-year schools. Hispanics earned over 54,000 bachelor's degrees in 1994-95, or about 5 percent of all bachelor's degrees awarded that year, and 14 percent of the bachelor's degrees awarded in foreign languages and literature.

Russell (1998) notes that with so many Hispanic immigrants coming to the U.S. from countries where adults have little schooling, such as Mexico, the education attainment of Hispanics as a whole will remain well below average into the 21st century.

Health: The health status of Hispanics is greatly influenced by immigration. Not only do immigrants boost the Hispanic birth rate, but they are also less likely to be covered by health insurance than the average American. Their overall health status is a mixture of good and bad news. For

example, Hispanics are less likely to die of cancer and heart disease than the average American, but their homicide rate is 59 percent above average. Infant mortality is below average, but the incidence of AIDS and tuberculosis is above average (Russell 1998).

Nearly 700,000 babies were born to Hispanic women in 1996, or 18 percent of all American children born that year. This proportion will rise to 24 percent by 2020. Hispanics accounted for 47 percent of all births in California in 1996 and for 43 percent of births in Texas. Eighty-six percent of Hispanic births in California and 89 percent of those in Texas were to Mexican-American women.

Hispanics' life expectancy exceeds that of the average American. At birth, Hispanic males can expect to live to age 75, or two years longer than the average American male. Hispanic females can expect to live to age 83, or three years longer than the average American female. Twenty-one percent of Hispanics had a disability in 1994-5. This is a slightly smaller proportion than that for Americans as a whole because Hispanics as a group are younger than average (Russell 1998).

Households: Nuclear families (married couples with children) are a bigger share of Hispanic households than of both black and white households. This may reflect the fact that many are recent immigrants from countries where traditional family life is common. Married couples account for 54 percent of Hispanic households, a share that is equal to that of the total U.S. households. But Hispanics couples are much more likely to be raising children. Sixty-eight percent have children under age 18 at home as compared with only 47 percent of all U.S. married couples. Sixty-six percent of Hispanic children live with both parents, slightly less than 72 percent of all children who live with both parents.

The marital status of Hispanic men and women is similar to that of the American population as a whole. Fifty-four percent of Hispanic men and 57 percent of Hispanic women were married in 1998. The majority of American men aged 30 or older and women aged 25 to 64 are currently married.

Largely because of the high rate of immigration, Hispanic householders are much younger than householders in the nation as a whole. Only 11 percent of Hispanic householders are aged 65 or older, versus 22 percent of all U.S. householders; 37 percent are under 35, versus 25 percent of all U.S. householders.

Housing: Hispanics are much less likely to own a home than the average American. Hispanic home ownership will continue to lag behind that of the average American because so many Hispanics are recent immigrants with low incomes.

Forty-two percent of the nation's 7.8 million Hispanic householders own their home. This compares with a home ownership rate of 65 percent for all Americans. Russell (1998) notes that regardless of home ownership status, most Hispanics reported in a 1995 American Housing Survey that they were satisfied with their home. On a scale of 1 to 10 with 1 being the worst and 10 the best, 67 percent rated their homes an 8 or higher. Most Hispanics were also satisfied with their neighborhoods. Only 11 percent say their neighborhood has a crime problem.

Hispanic householders are much more likely to be without a telephone than the average American, 17 versus 6 percent. Among Puerto Ricans, 22 percent have no phone.

Twenty-one percent of Hispanics moved between March 1995 and March 1996. This mobility rate is higher than that of the total population because Hispanics are younger than average and because so many are renters, who have higher mobility than homeowners.

Income: The continuing arrival of new Hispanic immigrants with little education from relatively poor countries lowers the average income of Hispanics overall. The economic status of Hispanics will remain below that of the average American as long as immigrants account for such a large share of the population. More than one in four Hispanic families is poor, including 18 percent of couples and 51 percent of female-headed families. Since 1980, the number of Hispanic families in poverty has grown 33 percent (Russell 1998).

The median income of Hispanic households fell 7 percent between 1990 and 1996, to \$24,906 after adjusting for inflation. This was the sharpest income decline among all racial and ethnic groups. Consequently, Hispanic median household income fell relative to the median of total households, from 75 to 70 percent. Hispanic household income peaks in the 45-to-54 age group, with a median of \$30,709 in 1996. By household type, median income is greatest for married couples, at \$32,379. Between 1990 and 1996, the median income of Hispanic men who worked full time fell 8.5 percent after adjusting for inflation, while the median income of Hispanic women who worked full time fell 1.6 percent (Russell 1998).

In general, Hispanics earn less than the average worker because so many are recent immigrants. By ethnicity, earnings are greatest for Cuban men. Seventeen percent of Cuban men who work full time earned more than \$50,000 in 1995.

Labor Force: Hispanics are far less likely to be employed in professional or managerial occupations than whites, blacks, and Asians. The explanation for this, according to Russell (1998), lies in the large share of Hispanics who are poorly educated immigrants, many of whom work on farms or in private households. Between 1996 and 2006, the number of Hispanic workers will grow 36 percent. Hispanics will account for 12 percent of the labor force in 2006.

The labor force participation rate of Hispanic men, at 80 percent, is significantly higher than the 75 percent of all U.S. men. In contrast, Hispanic women are much less likely to work than the average woman, 55 versus 60 percent. Among Hispanic women, those of Puerto Rican origin are least likely to work outside the home, with a labor force participation rate of just 49 percent.

Only 15 percent of Hispanic workers are in managerial or professional specialty jobs, accounting for only 5 percent of all those employed in those occupations. The occupational distribution of Hispanics varies by ethnicity. While 22 percent of Cubans are employed in managerial or professional specialty occupations, the figure is just 12 percent among Mexicans.

According to a 1996 Bureau of the Census survey, 48 percent of Hispanic households have two or more earners, a slightly greater share than the 45 percent of all households with two earners. Nevertheless, among Hispanic married couples, only 48 percent are dual earners, less than the 56 percent national average. For 36 percent of Hispanic couples, the husband is the only worker Russell (1998). When this statistic is considered in the context of the high fertility rate of Hispanic women and the very rapidly growing Hispanic population, it suggests that Hispanic women must devote their greatest energies to child rearing within the home.

Asian Americans

Population: Despite their projected rapid population growth, Asian Americans will account for just 6 percent of the U.S. population in 2020. African and Hispanic Americans will continue to greatly outnumber Asians for decades to come. Behind the growth of the Asian population is a steady high rate of immigration. Asia provided 34 percent of all immigrants to the U.S. in 1996. The largest numbers came from the Philippines, India, Vietnam, and China. Fully 63 percent of Asians in this country are foreign born, according to the 1990 census. Asians with ethnic origin in Vietnam, India, and Korea are most likely to be foreign born. The Asians least likely to be foreign born are those whose ethnic origin is Japan.

According to the 1990 Census, most Asian Americans speak English "very well." Only 38 percent of those aged 5 or older do not speak English fluently. But more than half of Asians aged 65 or older do not speak English "very well."

Most Asians live in the western U.S., where they account for about 13 percent of the population in the Pacific coastal states of California, Oregon, and Washington. California is home to about 39 percent of the nation's Asian population, including 52 percent of Filipinos and 46 percent of Vietnamese. Los Angeles has more Asians than any other metropolitan area. While the Asian population is strongly regionalized, the Asian influence on American culture can be felt in all parts of the U.S.

Education: The education level of Asians is much higher than that of the average American because many are highly educated immigrants with professional jobs. However, this level could fall in the future if more immigrants arrive from countries such as Vietnam, where adults have, on average, little formal education.

As of 1996, 83 percent of Asians were high school graduates, versus 82 percent of the total U.S. population. Forty-two percent of Asians were college graduates, a much higher share than the 24 percent of the total population that has a bachelor's degree. Among Asians, Vietnamese Asians are the least educated because many are refugees who fled Vietnam after the war. Only 61 percent of Vietnamese Americans had a high school diploma as of 1990 (Russell 1998).

Asians are more likely than other Americans to be enrolled in school. While just 4 percent of the total U.S. population is Asian, 6 percent of all college students and 10 percent of those enrolled in first-professional degree programs are Asian. More than 60,000 bachelor's degrees were awarded to Asian Americans in 1994-95. Asians earned 13 percent of bachelor's degrees awarded in biological sciences and 11 percent in engineering. They also earned from 13 to 19 percent of first-professional degrees in the fields of dentistry, medicine, optometry, and pharmacy.

Health: For all but a few health conditions, Asians fare much better than the average American. Infant mortality and death rates for accidents, heart disease, and cancer are all far lower for Asians than for the population as a whole. The incidence of tuberculosis is above average for Asians, however. Many Asians are immigrants living in cramped quarters where tuberculosis spreads easily. Because Asians are more metropolitan than other racial or ethnic groups in the U.S., they are more likely to live in areas with poor air quality.

More than 167,000 babies were born to Asian American women in 1996, or just over 4 percent of all babies born that year. This proportion should rise to 7 percent by 2020. Asians accounted for 70 percent of births in Hawaii in 1996 and 11 percent of those in California.

The death rate for Asians is lower than that for the total U.S. population. Consequently, life expectancy for Asians is well above average. At birth, Asian males can expect to live to age 80, or seven years longer than average. Asian females can expect to live to age 85, five years longer than average. Even at age 65, Asian life expectancy remains three to four years greater than life expectancy of the average American. Russell (1998) notes that the marked Asian health advantage could diminish if immigrants with low levels of education and income become a bigger share of the Asian American population as a whole.

Households: Asian households are more likely to be nuclear families than the average American household because many Asians are immigrants from countries with traditional lifestyles. As the children and

grandchildren of immigrants adopt the more freewheeling American lifestyle, their family structure is likely to change. Because many of the Asians immigrating to the U.S. are young adults, Asian householders are much younger than the average for the U.S. population. Only 10 percent were aged 65 or older in 1980, just half the share among households nationally.

Partly because of their younger age, Asian householders are more likely to be married couples than householders in the nation as a whole, 61 percent versus 54 percent. While only about one in four households nationally is a nuclear family (a married couple with children under age 18), the proportion is 54 percent for Asian Indian households. Because married couples are more common among Asians, Asian children are more likely to live with both parents than the average American child, 83 versus 72 percent.

Asians are more likely to be married than men and women in the U.S. as a whole. Overall, 60 percent of Asian men and women aged 15 or older are married. This proportion peaks at 70 percent among Asian Indian women and 65 percent among Asian Indian men.

Housing: Asian Americans own some of the most highly valued housing in the nation, in large part because so many live in the two states with the most expensive housing, Hawaii and California. Russell (1998) reports that, overall, homes owned by Asians had a median value of \$178,000 in 1990 compared to a median value of \$78,300 for the average American home. However, Asians are less likely to own a home than the average American. Just 53 percent of Asian householders own their homes, versus a home ownership rate of 65 percent nationally. However, they are more likely to be homeowners than are African, Hispanic, and Native Americans.

As of 1990, the largest number of Asian households in any one metropolitan area was in Los Angeles-Long Beach, CA, followed by New York City, Honolulu, and San Francisco. These four metropolitan areas accounted for 35 percent of all Asian households in the nation. Among the 25 metropolitan areas with the most Asian households, the home ownership rate was highest in Nassau-Suffolk, NY, at 77 percent. The value of Asian homes was highest in San Francisco, with a median of \$304,100. Russell (1998:34) notes that the Asian home ownership rate could fall in the years ahead if immigrants from poor Asian countries such as Vietnam become a larger share of the overall Asian population.

Income: The median income of Asian households fell 9 percent between 1990 and 1995 as the recession cut into earnings and growing numbers of Asian immigrants depressed incomes. Despite the decline, the median household income of Asians is significantly higher than that of the average household because so many Asian households have two or more earners. Twenty percent of Asian households had incomes of \$75,000 or more in 1995. Asian couples had the highest incomes, with a median of

over \$50,000. More than one in four Asian couples had incomes of \$75,000 or more.

Asian men who worked full time earned a median income of \$35,788 in 1996, up 9 percent since 1990 after adjusting for inflation. Asian women earned a median of \$26,313, down slightly since 1990. Asian men and women earn slightly more than the average full-time worker because they are better educated. In spite of these impressive statistics, due to the number of poor recent immigrants poverty is more common among Asians than among the population as a whole.

Russell (1998) notes that the future affluence of the Asian population depends on immigration patterns. If growing numbers of immigrants arrive from countries with little education, such as Vietnam, Asian incomes could drop. But if a growing share come from countries with high education levels, such as India, then Asian incomes as a whole could rise.

Labor Force: More than 4.6 million Asians were in the civilian labor force in 1996—74 percent of Asian men and 59 percent of Asian women, or 66 percent of all Asian Americans aged 16 or older. Over half of Asian men and women who work full time are in managerial or professional specialty occupations. Among Asian men in 1990, the labor force participation rate was highest for Asian Indians, at 84 percent. Among Asian women, the rate was highest for Filipinos at 72 percent. A majority (53 percent) of Asian households have at least two earners. This compares with 45 percent of total households and is the highest proportion among all racial groups.

Russell (1998) notes that the number of workers who are Asian or of "other" race (primarily Native American) will grow 41 percent between 1996 and 2006, according to projections by the Bureau of Labor Statistics. The Asian and "other" share of the labor force will reach 5.4 percent by 2006. The occupational distribution of Asians will become more like that of the total population in the years ahead if less-educated immigrants become a larger share of the Asian American population.

3 Identification of Baseline Information

Known Preferences for Recreation Activities

Native Americans

There is still a paucity of published recreation research among Native American groups (McDonald and McAvoy 1997). Early in 1997 ERDC identified the need for primary source data on Native American recreational habits and preferences. To acquire this data, six focus groups were organized during the summer of 1997 in two Corps districts (Tulsa and Omaha) with high Native American visitation of their operating projects. This results of this research were initially presented in Dunn and Feather (1998). Two distinct recreational styles were observed depending on the tribe's level of acculturation to mainstream Anglo-American society. The tribes of Oklahoma had a distinctly more "civilized" recreational style than did the Sioux tribes of South Dakota. This ethnocentric term "civilized" has been traditionally used for the five acculturated southeastern tribes (Cherokee, Choctaw, Creek, Chickasaw, and Seminole) which were forcibly removed by the U.S. Army to Indian Territory (Oklahoma) in the 1830s during the "Trail of Tears" episode.

The meeting notes from the volatile Anadarko, OK, focus group session will be presented in a later section on focus group methods. The primary findings of the two focus groups conducted in eastern Oklahoma among the highly acculturated "civilized" tribes were these:

• Native Americans want to pass on their language and culture to their children and to familiarize Euro-Americans with their culture as well. Interpretive signs, displays, and living history activities at Corps projects which have been developed in consultation with resident Indian tribes would be enthusiastically accepted by Native Americans. There is a great need for the Corps to integrate educational opportunities and recreational experiences for Native American visitors.

- The recreational activities pursued by Native Americans in eastern Oklahoma include swimming, fishing, camping, hiking, picnicking, hunting, gospel singing, and Indian dancing. While many of these activities are also enjoyed by Euro-Americans, Native Americans typically recreate in much larger social groups, e.g. 50-200 people. Most Corps picnic areas are not designed to accommodate such large groups.
- Organized dancing events/competitions, known as powwows, which can be ceremonial/religious or purely social in nature, are the focus of much of the social life of Native Americans. Generally the social powwows are intertribal, with one tribe hosting, and are open to the public. With few exceptions, Euro-Americans are welcome participants. Corps projects which provided facilities such as dance arbors, or camping areas which could be reserved/leased by the hosting tribe, would be much more "Indian-friendly" and could expect higher Native American visitation.
- Most recreational activities of Native Americans are driven by concern for their youth. The education of children and teens by elder Native Americans through the use of traditional Indian recreational activities (e.g., powwows) appears to be an essential component of their culture. However, such non-educational activities as basketball and volleyball are becoming more popular at tribal centers in Oklahoma.
- The major challenges to Native American recreation include the need for block reservations at campsites, adequate toilet/shower facilities, sufficient beach space, larger fire pits, high user fees, access for the elderly, the racist attitudes of some personnel (gate attendants) at Corps projects, and the need for private areas for ceremonial/religious activities. Corps project managers willing to work with resident Indian groups on these problems can expect a dramatic increase in Indian visitation. Many of these problems stem from the larger recreational group size of Native Americans. The racist attitudes were not attributed to uniformed Corps personnel but only to "Mom and Pop" gate attendants. The user fee issue was raised by each of the six focus groups, specifically the waiver of these fees for Native Americans.
- Sporting tournaments, bodybuilding contests, and boat races were suggested as additional recreational events which could be sponsored by the Corps or held at Corps lakes under tribal sponsorship and which would attract Native Americans in eastern Oklahoma. There was great concern expressed about personal water craft (PWC) such as jetskis posing safety hazards on Corps lakes. These comments reflect the high degree of acculturation of the "civilized" tribes of eastern Oklahoma.
- Ceremonial and social dancing remains an important part of Indian life even among acculturated groups. The dance arbor provides shade for the viewers and focuses attention on the dancers performing in the center of the arbor. The construction of a dance arbor at Corps projects, which could be reserved for use during the year, would greatly increase Native American visitation. Also, it would be beneficial to construct some arbors in more private areas for conducting private ceremonies. Native Americans would be willing to

- serve as advisors on arbor construction or even to volunteer their labor if the Corps decided to allow arbor construction at its projects.
- Corps project areas need to have more flexible hours of operation.
 Some Corps public use areas close earlier that Native Americans would prefer. Most Indian social dancing is held in the evening, e.g., from 7-11 p.m. If the Corps is interested in increasing Native American visitation, keeping public use areas open during the evening hours is critical.
- Facilities for sports which are becoming popular among Native Americans such as disc (frisbee) golf and softball should be considered in future modifications to Corps public use areas near Native American populations.

The three focus groups organized by ERDC researchers among the Sioux in South Dakota revealed a much less encouraging situation. Native Americans in this region are still struggling with the poverty of reservation life, and their recreation preferences reflect the adage often heard by ERDC researchers, that "Indians have learned to make do." The findings of the focus group at the Cheyenne River Reservation will be presented in a later section on focus group methods. The major findings of the two other South Dakota focus groups appear below:

Pierre Focus Group

- There is a general consensus that past Corps lake projects (along the Missouri River) have spoiled the land and the water. These projects took away a significant amount of timber which was a critical source of shade, fuel, and habitat central to the Native American livelihood in the region. Programs to reintroduce wildlife are important economically but also because of the spiritual connotations they have for some Native Americans. Environmental protection and restoration projects should continue to be part of the Corps' offerings. A fair amount of resentment toward and distrust of "white men" and the U.S. government still exists.
- Water and electrical power supplies are substandard on many of the reservations. A portion of the money generated by hydroelectric power stations should be set aside to improve reservation infrastructure. The Native Americans here are very interested in having a participatory role in future land and water management decisions. It is important that the perspectives from the grass roots Native Americans are clearly taken into account.
- Economic development and health are a high priority for Native Americans in the region along the Missouri River. Corps initiatives that could bring jobs should be a priority. Present positions at Corps facilities should be filled by Native Americans, especially where interpretation of cultural resources is addressed. Many tourists come to South Dakota to see Native Americans—why not hire them? Future developments, like a golf course at Fort Thompson, should be operated by Native Americans.

- Native Americans enjoy many of the same recreational activities as do Americans in general. Such activities include fishing, swimming, boating, camping, hunting, gardening, and more seasonal activities such as cross-country skiing, skating, and hockey. However, due to the cost, Native Americans rarely recreate in boats, jet skis, or other expensive accessories. They are generally comfortable with this limitation, as Native Americans "make do with what they have."
- Native Americans also enjoy recreating together in powwows, which are held generally every weekend. The Corps could assist tribal members by providing the tribe with a suitable free location furnished with water, an arbor, an arena area, and camping pads for tents. The commercial popularity of the powwows could lead to increased tourism and create more jobs.
- Native Americans enjoy gathering for storytelling, much of which is done to pass on tribal traditions and culture. Many other Native American recreational opportunities are youth-driven as well. The Corps could provide a summer camp for tribal youth, especially at-risk youth. The camp could be staffed by Native Americans, which would provide economic benefit to the tribe.
- The price charged by the Corps for swimming and camping at its project sites could be lowered or waived for Native Americans. Many tribal people in this region suffer from poverty and unemployment. It is difficult, if not impossible, for some to afford entry fees. To them, the idea of spending money on recreational pursuits is rather unrealistic.

Fort Thompson Focus Group

- Native Americans particularly enjoy such activities as softball games and tournaments. Fishing, boating, picnicking, horseshoe tournaments, biking, and hiking are also popular.
- Youth are seen as the driving force behind decisions about the types of recreational activities to be pursued. It is a point of great pride that two young Native American men work as rangers at Lake Sharpe.
- Native American powwows are an important cultural activity, but other events such as storytelling, music performances, and plays would also provide opportunities for enjoyment by non-Native Americans.
- There is a perceived need to link economic opportunities for Native Americans to recreational development.
- Corps facilities such as pavilions and showers should be expanded to accommodate larger groups of Native Americans. The existing facilities at Lake Sharpe are well maintained, but they are too small for groups holding powwows.
- There are some safety issues related to water-based outdoor recreation (e.g., by Native American youth). One cause of concern is that the Native American lifeguards at the Big Bend Dam swimming area are paid by the Crow Creek Sioux not the Corps.

Specific facility enhancements recommended by the Native American participants include nature trails, an outdoor theater, cultural museums, provision for water sports, and development and maintenance of campsites.

From the list of recommendations made by all six focus groups, Dunn and Feather (1998) compiled the following summary of suggestions for making Corps facilities more Indian friendly and increasing Native American visitation to Corps projects:

- Respect Native Americans and their cultural values (both uniformed Corps personnel and gate attendants).
- Deal with Native Americans as individuals not as Indian stereotypes—i.e., don't assume recreational facilities will be destroyed if they are close to a reservation or used primarily by Indians.
- Allow Native American artists to decorate Corps facilities that are being built to increase Native American visitation (this will serve to deter vandalism).
- Integrate education with recreation. For example, create interpretive programs for natural and cultural resources geared to Native American youth but available to all ages.
- Put up signs with English and Indian names when interpreting natural and cultural resources in Indian country.
- Consider hosting an annual powwow open to the public; do not charge a fee unless it is for a good cause, e.g., scholarships for Native Americans.
- Consider the construction of permanent structures that could be reserved by Native Americans for social and ceremonial dancing, e.g., dance arbors, amphitheaters, large shelters, etc.
- Hire Native Americans as interpretive guides, rangers, lifeguards, etc. (as a result of Federal grants, tribes will often share the cost of providing salaries for Native Americans).
- Consider waiving day use and camping fees in those parts of the U.S. with large Native American populations.
- Recognize that Native Americans recreate in large groups and plan accordingly in designing picnic shelters, camping areas, sanitary facilities; groups sizes of 50 to 100 people are not unusual.
- Construct fishing piers on Corps lakes in areas where Native Americans have limited means to buy boats.
- Allow traditional cooking areas (open fire pits) in some public use areas.
- Be more flexible in keeping public use areas open all night or at least until midnight at Corps projects in Indian country.
- Construct sports facilities to attract more Native American visitors; Indian youth love all sports but especially basketball and softball, which require the construction and maintenance of facilities.
- Design Corps public use areas so that swimming and picnic areas have adequate shade.

• Place literature on upcoming powwows or other events important to Native Americans in the resident office or visitor center at Corps projects in Indian country.

African Americans

In the 1960s and 1970s a major issue in recreation research concerned the "underparticipation" of minority groups in outdoor recreation, particularly in wilderness settings. Gramann (1996) notes that these early studies generally showed that a smaller proportion of African Americans took part in many types of outdoor recreation than did whites. These studies indicated the consistent underutilization by African Americans of some types of outdoor recreation areas, such as rural national parks and forests. More recent research has attempted to determine clear ethnic/cultural differences in recreation participation. For example, Dwyer (1994) studied recreation participation by ethnic minorities in 24 different activities and found that African Americans were significantly less likely than whites to participate in three categories of recreation behavior: (a) rural and wildland activities (hiking, tent camping); (b) activities involving water, ice, or snow; (swimming, water-skiing, motor boating, sailing, canoeing, downhill skiing, ice skating, cross-country skiing) and (c) activities that are expensive to participate in (e.g., golf). Dwyer found that African Americans were significantly more likely to take part in many outdoor team sports, such as outdoor basketball and softball.

In contrast to Dwyer's findings, Floyd et al. (1994) reported that whites and blacks who perceived themselves as middle class differed significantly from each other only in their preference for sports activities (blacks ranked them higher). There were no differences between middle-class blacks and whites in their preferences for such outdoor activities as hunting or fishing, camping or hiking, and boating or skiing. The explanation for this lack of difference involves the current debate on "Marginality vs. Ethnicity," which is addressed in Dunn (1998).

In his review of an extensive and growing body of research on African-American recreation, Gramann (1996:36) wrote:

Generally speaking, a higher percentage of white Americans tend to participate in wildland recreation activities than do African Americans. One frequent exception to this pattern is fishing and hunting. In some studies, blacks and whites have been found to participate at equal rates in both of these activities, while in other research minority groups have participated at higher rates. One explanation for this pattern is that fishing is an outdoor activity that may be done for sustenance by some low-income minority groups. Another explanation for the popularity of fishing and hunting to blacks is that African Americans have a long tradition of participating in these activities that dates back to the slavery period. A similar tradition of participation does not exist for many other contemporary recreation activities.

Other significant differences between blacks and whites (and other ethnic groups) in their recreation participation are summarized by Gramann (1996) from the recreation literature in the following categories:

Travel To and Use of Outdoor Recreation Areas: African Americans tend to stay closer to home than whites when engaging in outdoor recreation (Dwyer 1994; Dwyer and Hutchinson 1990; Washburne and Wall 1980).

Perceived Discrimination and Underutilization: African Americans still fear the potential for discrimination and bigotry in trips through "unknown" territory, e.g., rural America (West 1993 and Outley 1995). They also expressed a reluctance to go to places where African Americans do not constitute a majority of the visitors because they felt they would not be safe from racial intimidation (Wallace and Witter 1992). Taylor (1989) showed that many African Americans who are alive today either have personally experienced racist attacks when they visited "white" beaches, playgrounds, pools, or parks or were told of these experiences by others. As a result, many blacks are still reluctant to visit recreation areas where they feel that there is a chance they will not be welcome.

Research on African-American outdoor recreation style can be subdivided into four major categories. The following synopsis is based on Gramman's (1996) discussion:

Size and Composition of Social Groups: Blacks resemble non-Hispanic whites in their tendency to participate in recreational activities either as individuals or as members of single-generation peer groups.

Participation Motives: There is little information in the published literature to suggest any difference between blacks' and non-Hispanic whites' recreation motives. Gramann, Floyd, and Saenz (1993) speculate that the pattern of greater importance attached to family-related recreation motives by Hispanic Americans reflects a fundamental sociological function of recreation (and leisure in general) as a means of preserving core cultural values in an Anglo-dominated society. There are no data supporting such a pattern among African Americans.

Language: Non-Hispanic blacks show no substantial difference in language use from whites. Gramann reports no recreation studies dealing with idiosyncratic black dialects (e.g., Ebonics, American Black English, etc.).

Attitudes Towards Natural Resources and Facility Development:
Numerous studies have been conducted showing that blacks and whites differ substantially in their perceptions of natural environments and in their interests in natural resource management and environmental issues. In general, blacks have shown less concern for environmental protection issues, and less preference for purely natural settings and nature-oriented recreation activities. Taylor (1989) has argued that one possible cause for this difference is that, because many African Americans have limited

economic means, they cannot afford to be concerned about protecting the natural environment. They are forced to place a higher priority on securing other basic socioeconomic needs. This explanation follows the marginality explanation of ethnic differences in outdoor recreation participation. Other explanations for blacks' lack of interest in natural resources refer to a historical desire to be free of the land (associated with share-cropping and slavery), and the fear of dangerous wildlife found in natural environments (expressed in black folklore) (Gramann 1996). Studies also indicate that African Americans tend to prefer developed facilities and conveniences in recreation areas, while whites are more likely to prefer preserved natural/undeveloped areas (Washburne and Wall 1980; Scott 1993). Gramann (1996) indicates that concerns over personal safety appear to significantly affect the facility and services preferences of many African Americans. He describes one study in which black focus group participants mentioned security and protection from random violence as critical features of desirable urban nature centers (Wallace and Witter 1992).

With regard to acculturation, most recreation research has focused on non-English speaking groups, particularly Hispanics and Asian Americans. Gramann (1996) notes that these studies have been criticized in the literature for treating ethnic and racial groups as culturally homogeneous blocs. The assumption of cultural sameness within any ethnic minority group is far too simplistic. This is certainly true concerning black Americans. A clear example of their cultural heterogeneity will be presented in a later discussion of the focus groups held at Alabama River Lakes and Carlyle Lake. On the positive side, studies have demonstrated that the extent of acculturation (to the mores of the dominant cultural group) has important consequences for outdoor recreation behavior for non-English speaking groups. However, Gramann (1996) has noted that it is not at all clear that assimilation studies can be easily applied or even considered relevant to the African-American population in the U.S.

One hypothesis for explaining minority recreational behavior that may be of particular interest to the Corps of Engineers is that of selective acculturation. This is an alternative to the strict Anglo-conformity assimilation model which holds that ethnic minorities will change through time, giving up their distinctive cultural characteristics and adopting those of the dominant group (e.g., middle class white Americans). Gramann has persuasively argued that the Anglo-conformity model does not fit leisure/recreational behavior because these are areas in which core cultural values of the ethnic group are maintained and expressed. Consequently, the recreational behavior of ethnic minority groups may be highly resistant to change. The selective acculturation model predicts that while some aspects of socioeconomic behavior may change rapidly within a minority group, expressive leisure behavior, which is closely linked to the core values of the group, may persist indefinitely. The implication of this is that the recreational activities of some ethnic minority groups may require changes in management style on the part of the Corps of Engineers as a resource managing agency. Whether selective acculturation plays any role in explaining

African-American recreational behavior will be explored later following a discussion of the focus groups held in 1998.

Another aspect of acculturation research concerns the effects of perceived discrimination by minority groups. Gramann (1996) notes that most minority recreation studies have dealt with perceived discrimination as an independent variable negatively affecting minority recreation participation. It can also be studied as a dependent variable influenced by socioeconomic factors such as the level of acculturation or assimilation of the minority group. One perspective is that greater cultural assimilation (to the dominant cultural group) will lead to reduced levels of perceived discrimination by minority group members (Gordon 1964). This view has been called the ethnic enclosure hypothesis. Another perspective is that increased knowledge of the dominant culture will lead to greater perceptions of discrimination and even to feelings of group solidarity as members of the group become fully aware of their disadvantaged position vis-a-vis the dominant culture (Glazer and Moynihan 1963; Portes 1984). This has been termed the ethnic competition hypothesis. Research among Hispanic Americans has tended to support the ethnic enclosure hypothesis (Floyd and Gramann 1993). Gramann (1996) does not address whether perceived discrimination among black Americans has ever been studied as a dependent variable. Clearly, as noted above, perceived discrimination, as an independent variable, has negatively impacted African-American recreation participation.

Marginality vs. Ethnicity. For thirty years recreation researchers have struggled to explain why different ethnic minority groups recreate the way they do. Focusing mostly on African Americans, the key question has been why ethnic Americans have lower participation rates in outdoor recreation than white Americans. Early on, researchers attributed this discrepancy to the lower socioeconomic position of most black Americans in a white-dominated society (Gramann 1996). More sophisticated studies attempted to control socioeconomic variables, but participation differences persisted, suggesting that ethnic or cultural preferences may also be important in explaining recreation behavior among black Americans. These disparate findings led to the development of two competing hypotheses. The "marginality hypothesis" holds that the underparticipation of blacks in outdoor recreation results primarily from limited economic resources. This disadvantaged economic position is a function of historical patterns of discrimination. Gramann (1996:23) expresses it this way:

In other words, the marginal position of African-Americans with respect to society's major institutions (e.g. the economy, education, and government) negatively affects their education levels and disposable income, which in turn is reflected in reduced participation in some types of outdoor recreation activities.

The "ethnicity hypothesis" holds that minority underparticipation results from culturally based differences between ethnic groups in value systems, norms, and leisure socialization patterns (Washburne 1978).

Cultural forces, rather that socioeconomic factors, are more significant in explaining differences between blacks and whites in recreation behavior.

Empirical testing of these competing hypotheses has been very limited and somewhat inconclusive. Floyd (1991) reports that some studies have found support for the preeminence of cultural preferences over socioeconomic constraints in determining some types of leisure behavior. These studies have included studies of Native American and their use of national parks (Dragon 1986) as well as black-vs.-white participation in developed camping, primitive camping, boating, and sightseeing (Washburne and Wall 1980). Both of these studies support the ethnicity hypothesis. In contrast, Floyd et al. (1994) found no differences between middle-class blacks and whites in their preferences for such outdoor activities as hunting, fishing, camping, hiking, and boating or skiing. The only significant differences in recreation preferences between the two groups was that blacks ranked sports activities higher. These findings appear to support the marginality hypothesis with a few caveats noted by Gramann (1996). For example, while other studies have used objective measures of socioeconomic status, such as annual household income, to evaluate the marginality vs. ethnicity hypothesis, Floyd et al. (1994) employed a more subjective self report of social class.

Dwyer (1994) found significant differences between whites and three minority groups (African, Hispanic, and Asian Americans) across a variety of outdoor activities even after controlling for income, age, gender, household size, and location of residence. He found that African Americans were significantly more likely to take part in many outdoor sports. He also found that blacks and whites did not differ in their participation rates in fishing and hunting, nor did they differ in such low-cost and accessible activities as jogging, walking, and picnicking. These are the same activities most often available at Corps projects.

In general, Gramann (1996) reports that ethnic differences in recreation participation between white and black Americans appear to be minimized when members of each group are subject to the same pervasive constraints on outdoor recreation participation, such as low income, advanced age, and travel distance to recreation facilities. McGuire et al. (1987) found very few differences in recreation participation patterns between elderly black and elderly white respondents. Dwyer (1994) reported similarities between the recreation behavior of blacks and whites for highly accessible and inexpensive near-home activities that do not require special equipment or skill, such as walking, jogging, and picnicking. Based on this brief synopsis of previous research, it would appear that many of the recreational activities enjoyed by white Americans are also enjoyed by black Americans of similar socioeconomic status.

Hispanic Americans

The term "Hispanic" is an ethnic rather than a racial category. Unlike Asian, African, and Native Americans, Hispanic Americans can be of any race, although all share the same language and cultural ties to Spain. Hutchison (1988) defines ethnicity as "membership in a subcultural group on the basis of country of origin, language, religion, or cultural traditions different from the dominant society" and notes that "race on the other hand, is based on socially constructed definitions of physical appearances."

Gramann (1996) presents a detailed review of trends, policy, and research dealing with ethnicity and outdoor recreation. This extensive literature review was funded by HQUSACE and represents the first product of the Corps' work unit on Ethnic Culture and Corps Recreation Participation. While his review deals with all four of the minority groups being studied, only his findings on Hispanic-American recreational behavior will be discussed here. Gramann also identifies three major recreation research themes: underparticipation and underutilization, outdoor recreation style, and acculturation and recreation. Each of these themes will be briefly discussed.

Research on recreation underparticipation by ethnic minority groups indicates that for some groups the issue of underparticipation may be less relevant than their style of participation. For Hispanic Americans, the key research question does not appear to be why they underparticipate in outdoor recreation but why they vigorously participate the way they do. Gramann (1996) indicates that whites (Anglos) and Hispanics seem to be more similar in their recreation participation rates than whites and African Americans. One of several studies he cites to support this generalization is the U.S. Pleasure Travel Market study conducted in 1989 by Longwoods Research Group (Dwyer 1994). In this survey, Anglos and Hispanics exhibited higher rates of participation than African Americans in activities that usually occur in wildland settings.

Another study (Market Opinion Research 1986) reported that the percentage of Anglos and Hispanics who participated frequently in 35 different recreation activities differed by more than 10 percentage points in only three cases: running or jogging (Hispanics 26 percent, Anglos 15 percent), driving for pleasure (Hispanics 54 percent, Anglos 42 percent), and attending zoos or fairs (Hispanics 34 percent, Anglos 16 percent). Gramann (1996) notes that these three difference in frequent participation may be due to the generally younger age of the Hispanic population in the U.S. compared with the Anglo population.

Gramann (1996:29) reports that more Anglo-Hispanic similarities were also found in a regional survey of households in the Phoenix metropolitan area and an adjacent nonmetropolitan area (Gramann and Floyd 1991). This study uncovered no significant differences between Anglos and Mexicans in the percentage who had participated at least twice in 18 of 23 recreation activities during the previous year. Of the five statistically

meaningful differences, Anglos were more likely than Mexican Americans to have taken sightseeing trips (75 versus 52 percent), and to have visited archaeological or historic sites (59 versus 42 percent). Mexican Americans were more likely to have fished (52 versus 37 percent), camped in a tent (45 versus 35 percent), and ridden a mountain bike (23 versus 14 percent).

One difference between Anglo and Hispanic recreation patterns that is reported in the leisure research literature concerns travel distances. The tendency for minority-group members to travel shorter distances for recreation is also seen in comparisons between Anglo-Americans and Hispanic Americans. Gramann and Floyd (1991) found that Anglos were significantly more likely than Mexican Americans to have visited national parks, national monuments, and national forests outside the city of Phoenix at least twice during the previous year. Conversely, there were no statistically significant differences in the percentage of each group that had stayed close to home and visited city and neighborhood parks.

Gramann and Floyd (1991) found no differences between Anglo-Americans and Mexican Americans in the number of recreation visits to Canyon Lake, Apache Lake, or Roosevelt Lake in the vicinity of Phoenix. However, Mexican Americans made significantly fewer trips to Saguaro Lake, the closest of the reservoirs to Phoenix. The researchers attributed this difference to the extremely heavy use by Anglo-Americans which acted to reduce Mexican-American utilization. This instance of Hispanics' underutilization could be clearly linked to perceived discrimination.

Gramann (1996) indicates that the role that perceptions of discrimination might have on recreational travel by minority-group members has only recently been seriously investigated by researchers. For example, based on research in Chicago, Gobster and Delgado (1992) reported that reports of discrimination were highest among blacks (14 percent), and somewhat lower among Hispanics (7 percent) and Asians (9 percent). Chavez (1991, 1993) examined perceptions of discrimination among Hispanic and Anglo visitors to a wildland recreation area in southern California. Hispanics were more likely than Anglos to perceive themselves as targets of discrimination. According to Hispanics reporting discrimination, the primary perpetrators were law enforcement officers and, to a lesser degree, other visitors.

Gramann (1996:34) provides this assessment of the impact of perceived discrimination on minority recreation participation:

Visitors who stop using a particular recreation area because of undesirable changes in social conditions are said to be "displaced" (Schreyer and Knopf 1984). Similarly, potential visitors who never travel to an area in the first place because they expect to encounter negative circumstances onsite or en route are said to engage in "avoidance." That such processes are very real and may affect millions of residents around a recreation area has been demonstrated by recent research (Gramann 1991). . . . Ethnicity and race may be

associated with displacement and avoidance in at least two ways. First, minority groups may avoid certain areas where they expect to experience discrimination, either from other visitors or from managers. Second, a recreation locale may develop a specific identity as a site affording particular types of experiences that are desired by a cultural group (Williams and Carr 1993). For example, Lee (1972) described parks that were thought by their users "to belong to" a particular race, age, or sex grouping. Although members of the "possessing group" were comfortable in such areas, members of other groups avoided them.

Most studies of style differences in outdoor recreation have compared Anglo-Americans with Hispanic Americans. The term "recreation style" has been defined as "the unique quality of recreation behavior that arises from variation between ethnic groups in group size, participation motives, spoken language, and attitudes toward natural resources, including facility-development preferences" (Gramann, Floyd, and Ewert 1992). Gramann (1996) notes that Federal agencies' concern with ethnic variation in recreation style frequently reflects the pragmatic concerns of resource managers that the behaviors of some minority groups may result in inferior recreation experiences for non-minorities, vandalism of facilities, and the degradation of natural resources.

Research on outdoor recreation style can be subdivided into four major categories. The following synopsis based on Gramann (1996) focuses on Hispanic-American recreational style:

Size and Composition of Social Groups: Hispanics tend to recreate in larger social groups than most Anglo-Americans. Recent research indicates that associations between group type and activity participation that are typical of Anglo-Americans may not apply to Hispanic Americans (Gramann 1996). Hispanics are more likely than Anglos to visit recreational facilities as part of an extended family while Anglos and African Americans tend to participate as individuals or as members of single-generation peer groups. Gramann (1996:39) notes that many resource managers are reluctant to deal with large social groups:

In fact, it is not unusual for recreation areas to regulate group size, either by restricting the size of parties that can enter an area without permission, or by limiting the number of people, groups, or vehicles that are allowed to occupy a single campsite. In their study of campers in New Mexico, Irwin, Gartner, and Phelps (1990) reported that Mexican-American groups exceeded designated campsite capacity by an average of almost 30 percent.

Participation Motives: Hispanics place greater emphasis on family-related motives than Anglo-Americans. Shaull (1993) reported that Hispanic-Americans living in central and southern California rated "doing something with your family" and "bringing the family together more" as significantly more important to their outdoor recreation enjoyment than did

Anglo Americans. The strong emphasis on the importance of the extended (multi-generational) family is a recognized hallmark of Hispanic culture. Hispanics differ culturally from Anglos in their desire to maintain close ties with their large extended families. Most Anglo-American family members are typically satisfied with intermittent meetings (e.g., at Thanksgiving, Christmas, etc.) supplemented by telephone calls and letters. Hispanic Americans place much greater value on frequent face-to-face contact. While this kind of close contact is important to nuclear family life among Anglo-Americans, it is less integral to the Anglo extended family (Gramann 1996).

Gramann, Floyd, and Saenz (1993) have argued that the pattern of greater importance attached to family-related recreation motives by Hispanic Americans reflects a fundamental sociological function of recreation as a means of preserving core cultural values in an Anglo-dominated society:

...leisure is often subject to fewer perceived pressures to conform to the expectations of others than is behavior in the workplace or at school. Hence, even though minority group members may adopt those traits of a host culture that have strategic value for advancing their own socioeconomic status, recreation may remain an important social space in which basic cultural values can be maintained and expressed.

Language: Hispanics differ from many other ethnic groups in the United States in that they have maintained many aspects of their cultural heritage through maintenance of the Spanish language. The common pattern among other ethnic groups is a decrease in the use of ancestral languages over time, such that in the third and subsequent generations, English becomes the first language (McLemore 1991). Gramann (1996) indicates that the persistence of Spanish among Hispanic populations is related to several factors. One of these is that there is a continuing influx of new immigrants from Mexico, Central America, and the Caribbean. Another factor is that many Hispanic Americans tend to settle and remain in geographically concentrated areas where there is no great need to learn English for economic survival.

Another characteristic of Hispanic Americans is that many are bilingual. Leisure researchers report that it is common for post-immigrant generations of Hispanics to speak both English and Spanish fluently. Gramann and Floyd's (1991) telephone survey of Phoenix-area households found that 48 percent of adult Mexican-American respondents preferred to use both Spanish and English, 37 percent preferred mostly English, and 15 percent preferred mostly Spanish. While there is a marked tendency toward bilingualism among the Hispanic-American population, exclusive reliance on Spanish varies from place to place within the Southwest, perhaps as a function of the size of the Hispanic population and the need to use English in day-to-day interactions (Gramann 1996).

While many Hispanic Americans speak Spanish fluently, it should not be assumed by Corps project managers that they read and write Spanish with equal facility. Gramann (1996 41) reports the following:

Hispanic-Americans who are educated in U.S. schools often learn to speak Spanish as a young child at home, yet do not receive instruction on how to read or write Spanish in school. For this reason, there is no guarantee that written communication in Spanish will be any more effective at reaching Hispanic visitors with a message than will written communication in English. Simcox and Pfister (1990) recommended that informational services in areas visited by Hispanic users should rely on international symbols. Some resource management agencies (e.g. BLM) have emphasized Spanish-language training for law enforcement personnel and the development of public service announcements in Spanish for broadcast on local Spanish language radio stations (Chavez, Baas, and Winter 1993).

Attitudes Toward Natural Resources and Facility Development:

Many resource managers have observed that Hispanic users seem to be motivated primarily by "social" experiences and are less interested in the natural resources of the area (Gramann, Floyd, and Ewert 1992). Other researchers (e.g., Lynch 1993) report that Hispanic Americans' environmental perspectives differ from those of Anglo-Americans in that Hispanic culture does not isolate people from the natural landscape. The ideal Hispanic landscape is "peopled and productive" and does not include the notion of an uninhabited wilderness (Gramann 1996:41). What is the source of this difference in world view? Gramann (1996:42) observes that it seems to result from historical differences in the development of Anglo and Hispanic culture in North America:

Knowlton (1972) points out that early Hispanic settlers in the New World identified very closely with the land as a means of sustenance. Although very extensive private land holdings existed in the Spanish colonies and postcolonial Mexico, communally owned lands, i.e., ejidos, were regarded as especially important among mestizo and native Indian populations, both for human life and village warfare. The English concepts of private property rights and human domination over nature were not necessarily antithetical to Hispanic culture, but the idea that one could monopolize vast acreages while others went landless was morally repugnant. Indeed, much of the impetus for social revolution in nineteenth-century Mexico was the restoration of communal village lands that had been absorbed into haciendas and other large private landholdings (Parks 1988). Legal battles to achieve this aim still occur in the U.S. in such states as New Mexico (Eastman 1991). This historical stake in the communal land base appears to be reflected in the environmental views of many U.S. Hispanics today.

The practical importance of this history lesson is that differences between ethnic groups in attitudes toward natural resources can be reflected in the importance of their motives for recreation participation. Hispanic groups tend to rate "talking to and meeting new people" and "doing some eating and drinking" as more important reasons for their recreation than do Anglos. When considering the importance of both social and nature-related motives, Hispanic groups tend to place greater importance than Anglos on both tranquillity and socializing with others in wildland recreation areas (Gramann 1996).

Regarding preferences in facilities and services, Hispanic Americans appear to favor greater levels of development than do Anglos. In one study Hispanic users evaluated parking spaces, signs, picnic areas, trails, garbage-disposal facilities, and toilets as being more important that did Anglos (Bass, Ewert, and Chavez 1993). Anglo visitors were more concerned about graffiti, vandalism, and water pollution in a stream that ran through the San Gabriel Canyon. Another study (Chavez and Winter 1993) in the San Bernardino National Forest showed that Hispanic visitors wanted more parking spaces and playgrounds to accommodate their larger extended families. Other studies reviewed by Gramann (1996) show clear cultural difference between Hispanic and Anglo campers. Anglos were more likely to list quiet surroundings, privacy, water, and space between campsites as preferred campsite characteristics, while Hispanic Americans placed more importance on toilets, camping space at each site, water, and fire rings. While the majority of Anglo campers preferred to be far away from other campers, the majority of Hispanic campers preferred to camp close together, presumably in large family groups. Clearly, the Hispanic-American population presents a challenge to the notion that "one size fits all" in the design and fit of recreational facilities.

One explanatory model for minority recreational behavior that may be of particular interest to the Corps of Engineers is that of selective acculturation. This is an alternative to the strict Anglo-conformity assimilation model which holds that ethnic minority groups will invariably change with sufficient time, giving up their distinctive cultural characteristics and adopting those of the dominant group (e.g., middle class white Americans). Gramann (1996) has persuasively argued that the Anglo-conformity model does not fit leisure/recreational behavior because these are areas in which the core cultural values of the ethnic group are maintained and expressed. Consequently, the recreational behavior of ethnic minority groups may be highly resistant to change. The selective acculturation model predicts that while some aspects of socioeconomic behavior may change rapidly within a minority group, expressive leisure behavior which is closely linked to the core values of the group may persist indefinitely. The implication of this model is that the persistent recreational activities of some ethnic minority groups may require changes in management style on the part of the Corps of Engineers as a resource managing agency.

Research among Hispanic Americans suggests that outdoor recreation appears to provide an opportunity for certain central values of Hispanic culture to be maintained (e.g., familism), despite assimilation on other cultural dimensions such as language (Gramann (1996)). Gramann, Floyd, and Saenz (1993) and Shaull (1993) examined the effect of Hispanic-American acculturation on the importance of family-related and nature-related experiences in outdoor recreation. Acculturation in these studies was measured by use and preference for Spanish versus English in everyday situations. Both studies employed statistical cluster analysis to derive three groups of Hispanics who varied by their degree of language acculturation. These were least-acculturated, bilingual, and most-acculturated. The researchers reported the following results (Gramann 1996:50-51):

After controlling for age, education, and the number of children in a household, Gramann et al. found that family experiences were most important to the most highly acculturated Mexican Americans. Further, this importance was significantly greater than that among Anglo Americans. Interestingly, the highly acculturated group also placed more emphasis on family experiences than did the least acculturated Mexican Americans, who were not different from Anglos in this regard. This is opposite to the pattern that would be predicted by an Anglo-conformity model of acculturation. The researchers explained this paradox in terms of selective acculturation and the disrupting effect of immigration on local family ties. The least acculturated Mexican-origin respondents were primarily immigrants and would not be expected to have extensive local family networks. Thus, family experiences in outdoor recreation would be less important to this group. However, over generations, family networks could be rebuilt in the U.S. so that the core Hispanic value of familism could be reexpressed in the recreation styles of subsequent generations. This would explain the greater importance of familism to the most acculturated Mexican-Americans. Thus, outdoor recreation appeared to provide an opportunity for certain central values of Hispanic culture to be maintained, despite assimilation on other cultural dimensions, such as language.

Floyd and Gramann (1993) have also examined the effect of language acculturation on the recreation participation of Mexican Americans. After controlling for age and education in a population living in the greater Phoenix area, they found that the least acculturated Mexican Americans took part in significantly fewer recreational activities than Anglos. This proved true for four out of five activities examined: water- and snow-based activities, urban activities, consumptive recreation (fishing and hunting), and travel-oriented activities. Bicultural Mexican Americans and the most assimilated group differed from Anglos in only two of the five recreation categories. This appears to support an Anglo-conformity model in which the more Anglo-speaking the group is, the more Anglo-acting the group becomes. Other researchers have also found that U.S.-born Hispanics were more similar to Anglos than to Mexican-born visitors in their participation in hiking, walking, and motorcycle riding. However, Gramann (1996:52)

reports that even the most acculturated U.S.-born Hispanics were more like immigrants than Anglo Americans in their participation in other activities, such as group sports, picnicking, and target shooting.

Another acculturation research topic affecting minorities' recreation participation involves the concept of perceived discrimination by minority groups. Perceived discrimination has most often been viewed as an "independent variable" where it negatively impacts the participation of the minority group, i.e., people will not recreate where they feel they are not wanted. Gramann (1996) describes another line of research in which the perception of discrimination is treated as a "dependent variable" that is influenced by a variety of social and economic factors. Concerning Hispanics, this research has tended to support the ethnic enclosure hypothesis, which predicts that greater cultural assimilation will lead to reduced levels of perceived discrimination by minority-group members (Gramann 1996: 52-53):

As members of minority groups acquire greater knowledge of the dominant culture, become more socially integrated, and experience upward social mobility, they should also experience greater acceptance into mainstream society and perceive less discrimination . . . in a study by Floyd and Gramann (1995) Mexican Americans perceived less discrimination in recreation areas as their level of education (a measure of social mobility) increased and as their use and preference for English over Spanish increased.

Gramann's (1996) synopsis of research on acculturation and recreation suggests that cultural assimilation does play an important role in Hispanic-Americans' outdoor recreational behavior. In some cases, the dominant pattern appears to be one of Anglo conformity, with the recreational behavior and style of Hispanics becoming progressively more Anglo-like as acculturation increases. In other cases, particularly those involving core ethnic values such as familism, the evidence for Anglo-conformity is less conclusive. Gramann (1996) suggests that such contradictions in research findings may be due to problems that arise from comparing results of regional household surveys with those of onsite visitor studies, and to differences in the way cultural assimilation is measured.(e.g., as generational tenure or language acculturation). In addition, some studies have failed to control for other critical differences between cultural assimilation groups, such as age, income, and education, that could affect recreation style and participation. In general, however, perceptions of discrimination among Hispanic Americans tend to decline with greater levels of assimilation into Anglo-American society. Gramann (1996) points out that an important consequence of this is that there may be major differences in opinions regarding the prevalence of discrimination in recreation areas depending upon Hispanic Americans' level of cultural and structural assimilation.

Asian Americans

At this time Asian Americans represent only about 3.5 percent of the American population, but because this group is so regionalized its future growth may become highly significant to future Corps operations in the western United States. Even now Asian Americans represent a significant customer base for the Corps of Engineers in the Pacific Coast States. Gramann (1996) notes that California is projected to experience major growth in its already large Asian-American population. The Pacific Northwest is another area with a relatively large Asian-American population that will increasingly impact future Corps operations in that region. Yet relatively little has been published on the recreational habits of Asian Americans. Gramann (1996) notes that compared with other ethnic groups, there is a general scarcity of data on the outdoor recreation behaviors, styles, and constraints of Asian Americans. He identified three major recreation research themes: underparticipation and underutilization, outdoor recreation style, and acculturation and recreation. Each of these themes will be briefly discussed.

Gramann cites the Dwyer (1994) study of recreation participation in 24 different activities as one of the few investigations to compare whites, African Americans, Hispanic Americans and Asian Americans. After controlling for income, age, gender, household size, and location of residence, Dwyer still found significant participation differences between groups across a variety of outdoor activities. In his analysis Asian Americans were less likely than whites of similar socioeconomic status to participate in only 3 of the 24 activity types: swimming at pools, bicycling, and softball and baseball.

Other studies also suggest that Asian Americans tended to be more like whites than blacks in their recreation behavior. But Gramann (1996) notes that in the case of consumptive wildlife activities, such as hunting and fishing, similarities in participation rates between white and Asian groups may mask ethnically based differences in the meanings of these activities. For example, members of some Asian groups will use hunting and fishing as a form of subsistence, rather than as a form of recreation. Hutchison (1992) argues that the popularity of hunting and fishing among recently arrived Hmong immigrants in Wisconsin can be attributed to the fact that most Hmong men hunted and fished in their native Laos as a form of economic subsistence.

One of the most important factors affecting utilization of recreational facilities by minority groups is perceived discrimination. Previous Tech Notes have discussed this issue in depth. Gramann (1996) reports that the recreation research literature suggests discrimination at recreation sites may be perceived by Asian Americans as well as African Americans. This perception will invariably negatively impact recreation participation. For example, Lee (1972:79) noted that Chinese residents of one California community were hesitant to visit a nearby regional park for racial reasons. One Chinese informant commented:

Garfield Park is not for Chinese. They cannot feel that it is their own. After all, it is only very recently that they have been permitted to use it. It belongs to the White American culture.

We have seen that Asian American recreation participation tends to resemble that of white groups. Whether that resemblance holds true for Asian Americans' recreation style is much less clear. Based on the authors' interviews of Corps rangers and managers at the two California lakes, two interrelated factors must be considered: specific ethnic identity and length of time in America. Asian Americans as a group have tremendous cultural diversity. It would be a serious mistake to view them as a culturally homogeneous bloc. Groups with a long (multiple generations) history in America such as Chinese and Japanese Americans in California tend to have a far greater degree of cultural assimilation to mainstream American culture than do recent Asian immigrants. Cultural "assimilation" refers to an ethnic minority's acceptance of the dominant cultural pattern of the host society (e.g., language, religion, diet, dress, and child-rearing practices) (Gramann 1996). The recreation style of such highly assimilated Asian Americans would be less ethnically distinctive than that of more recent immigrants to the U.S. such as the Vietnamese, Cambodian, and Laotian groups displaced by the Vietnamese War. It would be a mistake to predict the total cultural assimilation of all Asian groups with the simple passage of time, as suggested by the "melting pot" hypothesis which was favored in the past. To understand the dynamics of cultural change requires an understanding of the process of acculturation.

As stated earlier, research among Hispanic Americans suggests that outdoor recreation appears to help maintain certain central values of Hispanic culture (Gramann (1996)). We might anticipate similar results for Asian-American groups. Unfortunately, very little research on recreation and Asian-American cultural assimilation has been conducted. There is no systematic test of the selective acculturation model for Asian Americans reported in the Gramann synthesis. One 1994 Forest Service study of Chinese Americans in Chicago found that older adults of the immigrant generation differed substantially from younger, U.S.-born Chinese in their leisure preferences. Older adults listed walking, socializing, and traditional exercise, such as tai-chi, as typical activities they preferred. In contrast, younger adults and children preferred activities that closely paralleled those of Euro-Americans.

Gramann (1996:49) notes that there is another reason for rejecting the melting pot or Anglo-conformity model as an explanation for minority recreation behavior—the concept of boundary maintenance:

... when ethnic groups view themselves as persecuted or discriminated against, they often react by maintaining social, psychological, and physical boundaries between themselves and other groups (Buck 1978). These boundaries inhibit the assimilation process... Boundary maintenance may be one reason for the persistence, despite increasing contact with other cultures, of the distinctive ethnic

identities of Old Order Amish in Pennsylvania (Buck 1978), Native Americans in the Southwest (Allison 1993), and recent Hmong immigrants who have settled in California and the Great Lakes region (Hutchison 1992). These and other cases strongly imply that interaction between minority and majority groups does not always lead to full acculturation, as predicted by the Anglo-conformity model. On the contrary, interaction may actually produce active efforts to protect core cultural values from assimilation pressures. For example, Hutchison (1992) points out that among Southeast-Asian Hmongs who have settled in several Wisconsin cities, there is a commitment to preserving traditional family clan structures and older cultural traditions, even among the first generation growing up in the United States.

Asian Americans as a group show great diversity in their level of acculturation to mainstream American society. All the different Asian groups living in America could theoretically be ranked on a scale from most to least acculturated. Such diversity makes the study of Asian-American recreation a formidable challenge, to say the least. The approach taken in the Tech Note on Asian American recreation (Dunn 1999) was to attempt to focus on one Asian group, the Hmong, and to understand how their values were expressed in the group's recreational behavior. In this way the process of acculturation becomes more understandable and positive management implications become discernible.

Trends Affecting Recreation

Regionalization

In a provocative article entitled "The Diversity Myth," Frey (1998) argues that the majority of America's cities and towns lack true racial and ethnic diversity even while the observed increases in ethnic minority populations would lead us to believe otherwise. While there are indeed more minority citizens than ever before, the nation as a whole is becoming more ethnically regionalized. There are relatively few counties and metropolitan areas with a significant presence of two or more minority groups. Frey identifies just 21 true "melting-pot metros" including the three largest gateway cities for new immigrants: Los Angeles, New York City, and San Francisco. A brief synopsis of Frey's (1998) discussion of recent demographic trends affecting African, Hispanic, and Asian American populations is presented below.

African Americans: The most recent demographic data on African Americans indicate that they are most over-represented in the South, with some important clusters located in urban areas of the Northeast and Midwest. There is a broad swath of states in the Northeast, Midwest, Rocky Mountains, and Northwest that are mostly white and where none of the

minority groups come close to approximating the national percentages of the population (blacks-12 percent, Hispanics-11 percent, Asians-3.5 percent, and American Indian-0.7 percent).

The data set presented by Frey reveals that there are only a few counties in the U.S. which have now or will shortly have "minority majorities." Many of these are inner counties of older metropolitan areas with large African-American populations, such as Philadelphia (PA) and St. Louis (MO). This trend will probably continue as it reflects traditional white flight to the suburbs and beyond (Frey 1998).

Frey (1998:43) proposes that for black Americans the 1990s represent both a return to the South (from industrial cities in the Northeast and Midwest), and substantial population movement within the South. The intra-South movement represents new gains for middle-class blacks in the suburbs of fast-growing metropolitan areas like Atlanta, Dallas-Fort Worth, and Washington-Baltimore. Black numbers are also swelling in parts of Florida that did not have a large African-American presence:

Middle-class blacks, in particular are in the vanguard of these New South pioneers. But black retirees who have spent most of their lives in northern and western cities are also attracted to many of the smaller rural counties of the South.

Most minority groups in the U.S., including black Americans, reside in metropolitan areas. Native Americans constitute an important exception. Frey (1998) reports that better than 85 percent of black Americans reside in metropolitan areas. In contrast, the share of the U.S. white population residing in non-metropolitan areas is approaching one-fourth, and less than half of the U.S. white population resides in the nation's largest cities. Frey concludes that lifestyles, tastes, and voting patterns in urban areas with large number of minorities and fast growing populations are likely to change dramatically in the near future, with the rate of change much slower and "majority minority areas" few and far between in the rest of the United States. What all this means for outdoor recreation management within the Corps of Engineers is that Corps lakes in the South will increasingly be providing services and maintaining facilities for a rapidly growing black middle class. Corps projects in the North and Midwest adjacent to large urban areas will also be providing services and maintaining facilities to meet the recreational needs of an expanding black population, with considerable diversity in socioeconomic status.

Hispanic Americans: The major point to be made about the Hispanic-American population distribution is that it is strongly regionalized around major "gateway" cities. Frey (1998) reports that the importance of immigrant "gateways" in both attracting and maintaining large Hispanic populations is evident in the rankings of the top metros for numerical gains in Hispanics during the 1990s. The ten metro areas with the largest Hispanic populations were also the ten largest gainers. Together they attracted more than half (52 percent) of new Hispanic residents between 1990 and 1996.

The top ten metros collectively contain 58 percent of the nation's Hispanic population. Los Angeles is home to fully one-fifth of the entire U.S. Hispanic population. It also ranks first in total growth, claiming 18 percent of all Hispanic population gains in the U.S. between 1990 and 1996. Its growth comes largely from Mexican- and Latin-American immigrants, but also from sustained high fertility rates among long-term Hispanic residents (Frey 1998:39). Other important gateway metros include Miami, which attracts and holds large numbers of Cubans; New York City, which attracts a large number of Dominicans, Puerto Ricans, and other Hispanic groups from the Caribbean; and Chicago, which has historically attracted large numbers of Mexicans. Frey (1998) reports that the rest of the ten Hispanic metro areas lie close to the Mexican border and continue to build on large, existing Latin-American populations. One of the few exceptions he reports to the size-begets-growth phenomenon is Las Vegas. It has benefitted from spillover migration from California, and also was an initial destination for some Latin-American immigrants, thanks to its booming economy and strong job market.

Frey (1998) reports that nationwide there are 226 counties where whites represent the minority population. Most of these were smaller counties in Texas and other parts of the Southwest where Hispanics are in the majority, or rural counties in the South where blacks are in the majority. Between 1990 and 1996, 43 counties turned from "majority white" to majority minority, and this trend is expected to continue in certain regions. Frey discusses two distinct instances of "minority majorities" predicted for the near future. The first is the inner counties of older metropolitan areas in the Midwest and Northeast where African Americans comprise the bulk of the minority population. The second includes counties in the Southwest and in California such as Alameda, Fresno, Tulare, Monterey, and Merced, which are receiving a large influx of both Hispanic and Asian immigration. In the Southwest and in California, the already large Hispanic population is expected to grow even more through a combination of natural increase (high fertility) and the continuing immigration of Hispanics to these areas.

One important characteristic of all minority populations in the U.S., including Hispanic Americans, is that most minorities reside in metropolitan areas. They are statistically likely to live in cities and metro counties. Frey (1998:43) reports that more than 91 percent of Hispanics reside in metropolitan areas with populations exceeding 1 million:

For consumer markets, this means that both large numbers of minorities and fast-growing populations will continue to be found in large urban areas. The lifestyles, tastes, and voting patterns of residents in these areas are likely to change dramatically. But for the rest of America change will come more slowly.

This means the Corps' outdoor recreation management in the Southwest and California will increasingly be providing services and maintaining facilities for a rapidly growing Hispanic population with a distinct recreation style and considerable diversity in socioeconomic status. Corps projects in the Northeast adjacent to "gateway metros" such as New York City will also be providing services and maintaining facilities to meet the recreational needs of an expanding Hispanic population.

Asian Americans: Asian Americans are expected to increase as a customer base in the Pacific Coast states and possibly in the Pacific Northwest. Gramman (1996:59) noted that there is a scarcity of data on outdoor recreation behaviors, styles, and constraints of Asian Americans. Information on Asian American recreation at two Corps lakes (Dunn 1999) serves as initial documentation of water based recreation.

Frey (1998:42) notes that while Asian Americans are even more concentrated than Hispanics in gateway metros, they are also geographic pioneers:

Fast-growing areas for them tend to be metropolitan destinations that already have some Asian presence. These include southern metros such as Atlanta, Dallas-Ft. Worth, Washington-Baltimore, and Raleigh-Durham-Chapel Hill, North Carolina. Asian pioneers are also evident in America's mid-section, in Omaha, Nebraska, and the suburbs of Minneapolis-St. Paul. Much of this Asian movement appears to be "chain migration" where friends and family follow the lead of the first pioneering movers. But it is still relatively circumscribed. Only 265 counties gained as many as 1,000 Asian Americans between 1990 and 1996.

Wealth and Spending

The Federal Reserve collects wealth data for only two racial and ethnic categories: non-Hispanic whites, and nonwhites and Hispanics. The non-white and Hispanic category includes Asians, blacks, Hispanics, and Native Americans (Russell 1998). The following discussion briefly summarizes Russell's lengthy treatment of the Federal Reserve data on this important topic.

The net worth of nonwhite and Hispanic households is below average in large part because blacks and Hispanics are less likely to own a home than the average householder. Home equity accounts for the largest share of Americans' net worth. Only 48 percent of nonwhite and Hispanic householders own a home, according to the Federal Reserve Board's 1995 Survey of Consumer Finances. Nonwhite and Hispanic householders have an average of only \$5,200 in financial assets, with transaction accounts (such as checking accounts) owned by the largest share (69 percent). Most nonwhite and Hispanic householders are in debt, owing a median of \$12,200 in 1995. The net worth of nonwhites/Hispanics will not increase much without a substantial rise in minority home ownership. Because so many black households are female-headed families with low incomes, black home ownership is likely to remain well below average. Russell (1998) notes that the net worth of Hispanics is heavily influenced by

immigration. Until immigrants become a smaller share of the Hispanic population, Hispanic wealth is likely to remain well below average.

What about nonwhite spending that could affect recreation patterns? Russell (1998) reports that America's 10.2 million black consumer units spent an average of \$23,442 in 1995, according to the Consumer Expenditure Survey. With a spending index of 73, blacks spent 27 percent less than the average consumer unit. While black spending is below average in many categories, it is above average on a wide variety of items, despite blacks' lower incomes. Blacks spend more than the average American consumer on such things as rice, meat, poultry, fish, and eggs; oranges: fresh fruit juice; telephone services; bedroom furniture; infants' furniture; boys' and girls' clothes; women's pants and suits; footwear; new cars; and color TV consoles. Russell (1998) notes that with the incomes of blacks rising faster than those of other racial or ethnic groups, black spending should approach or exceed the average on more items in the years ahead. Blacks will become an increasingly important market for many businesses, including outdoor recreation, especially those targeting children and young adults.

America's 8 million Hispanic consumer units spent an average of \$26,794 in 1995, according to the Consumer Expenditure Survey. With a spending index of 83, Hispanics spend 17 percent less than the average consumer unit. While Hispanics' spending is below average in many categories, it is above average on a wide variety of items. Because of their larger families, Hispanics spend 20 percent more than the average consumer unit on food at home. Hispanics spend more than the average consumer unit on items such as rice; white bread; meats, poultry, fish, and eggs; dairy products; fruits and vegetables; beer and ale; telephone services; laundry and cleaning supplies; infants' furniture; children's clothes; used trucks; and video rentals. Russell (1998) notes that Hispanic spending is greatly influenced by immigration. Because many Hispanics come from Mexico and other Latin countries with traditional, family-oriented cultures, their spending on items for the home such as food, cleaning supplies, video rentals, etc., is much higher than average.

Changing Attitudes

The National Opinion Research Center of the University of Chicago conducts a survey every two years. Its 1996 General Social Survey revealed two seemingly contradictory attitudes on the part of the American public (Russell 1998). Americans appear to be more tolerant than ever towards people of other races and ethnicities. Yet they are also concerned that America is becoming increasingly divided along racial/ethnic lines. The 1996 survey revealed an American public sharply divided on some diversity issues, but strongly united on others. The discussion below summarizes Russell's (1998) treatment of the 1996 survey data.

Based on the survey responses, Americans of all races and ethnicities tend to agree on what it means to be an American: obtaining American citizenship and being able to speak English. Race and ethnicity are relatively unimportant components of "American-ness." However, there are important differences beyond this very basic level. While the majority of blacks think it is very important to have been born in the U.S., fewer than half of whites and other racial/ethnic groups feel likewise. When asked whether racial and ethnic groups should maintain their customs or blend in, a minority of whites, blacks, and "others" favored maintaining distinct customs.

The biggest disagreements are between whites and blacks over the issues of black progress. While most whites think conditions for blacks have improved in the past few years, a minority of blacks agree. Nearly half of whites confess to thinking that blacks have worse jobs, income, and housing because they lack the motivation to pull themselves out of poverty. In contrast, blacks are most likely to blame discrimination. Blacks are much more likely than whites to think the government is obligated to help blacks. But blacks and whites agree on many black progress issues as well. Whites are almost as likely as blacks to disagree with the statement that blacks shouldn't push themselves where they are not wanted. Most whites favor fair housing laws. And most blacks and whites agree that blacks should work their way up without special favors.

Russell (1998) notes that "integration in housing, schools, and the work-place is now widespread and accepted by all." According to the survey results, most whites and blacks say their neighborhoods are integrated. Most would send their children to integrated schools. Most work with a mixture of races. But while 83 percent of whites are against the preferential hiring and promotion of blacks, only 46 percent of blacks are. An equal proportion of both favor affirmative action in the workplace. To whites, reverse discrimination is a real threat. Over 70 percent of whites think it is somewhat or very likely that a white person won't get a job or a promotion while a less qualified black person gets one instead. About half of blacks agree.

Whites are more likely than blacks or people of other races to want immigration reduced. While 57 percent of whites favor decreasing immigration, only 43 percent of blacks and 26 percent of "others" feel that way. The majority of whites and blacks, versus 45 percent of "others," favor stronger efforts to curb illegal immigration. Most blacks, but only 18 percent of "others," think immigrants take jobs away from people who were born in America.

Whites, blacks, and "others" are deeply divided on whether immigrants are good for the economy and on whether they increase the crime rate. But a majority of whites and "others" think immigrants make America more open to new ideas and cultures. Just 41 percent of blacks share this opinion.

Russell (1998:644) provides the following assessment of America's changing attitudes toward ethnic diversity:

Today's children and young adults have been raised to expect and accept diversity. They see people from all racial and ethnic backgrounds in positions of power and leadership, from the President's Cabinet officers to war heroes to movies stars. The American public will increasingly embrace diversity as young people replace less tolerant older generations. Immigration promises to be a hot-button issue far into the future regardless of the growing tolerance for racial and ethnic diversity. Behind the concerns over immigration is the never-ending quest for an equitable distribution of the nation's limited resources.

4 Identification of Appropriate Methods for Data Acquisition

Previous Ethnicity Research by Federal Agencies

Gramann (1996) provides a useful overview of ethnicity research conducted by Federal agencies such as the U.S. Department of Agriculture (USDA) Forest Service, the U.S. Department of the Interior (USDI) National Park Service, the USDI Bureau of Land Management, and the U.S. Fish and Wildlife Service. Of these major Federal recreation resource management agencies, only the USDA Forest Service has an institutionalized research focus that explicitly addresses management and social science issues pertaining to ethnicity, race, and outdoor recreation. Other agencies often collect data on the ethnicity or race of visitors, but this is rarely the primary purpose of their research. The issue to be considered here is the Forest Service's methodology for data acquisition.

USDA Forest Service

The USDA Forest Service has conducted ethnicity research on forest recreation in three regions of the United States. In California, research for the "Wildland Recreation and Urban Culture Project" has focused on identifying and contrasting the interface of national forests and large metropolitan areas, such as Los Angles, San Diego, and Phoenix. This research has examined the environmental values and perceptions of Anglo vs. Hispanic Americans through personal interviews at recreation areas and regional household surveys. The latter have permitted the identification of non-users as well as users of Forest Service lands, together with their non-use.

In Illinois the Forest Service has focused on the recreation behavior and environmental perceptions of racial and ethnic minorities in urban settings. This research has been conducted using face-to-face surveys of urban minority visitors in forest recreational settings. Gramann (1998) notes the research work unit "Managing Forest Environments for Urban Populations" has funded a study of first-nation (i.e., aboriginal) perspectives on national parks in Canada, one of the very few recreation studies to deal with Native Americans.

The third Forest Service work unit to include ethnicity and recreation in its research mission is located in Athens, GA. This research has emphasized national studies of recreation "customers" and the projected demand for outdoor recreation. Although ethnicity has not been a major focus of this research, racial data are usually collected in the surveys. Gramann (1996) notes that this group of researchers plans a national survey on recreation and the environment which would be the first nationwide household survey of recreation behavior by a Federal agency in more than a decade.

USDI National Park Service

The research conducted by the National Park Service (NPS) deals almost exclusively with surveys of visitors to national parks. One notable exception was the 1982-1983 Nationwide Recreation Survey (USDI National Park Service 1986) which included race variables (but not ethnicity variables) in its data set. Gramann (1996) notes that under NPS cooperative agreements with university partners, scores of park-specific visitor surveys have been conducted. With very few exception these surveys have not collected ethnicity data. Gramann speculates that one reason for this is that National Park Service units, except for some urban units and African-American heritage sites, do not normally attract ethnically diverse visitor populations.

The NPS "Visitor Services Project," based at the University of Idaho, is its response to the National Performance Review and Executive Order 12862, which requires the assessment of customer satisfaction. With rare exceptions, race and ethnicity data are not collected during the short visitor surveys conducted in ten NPS units each year. However, this may soon change. Gramann (1996) reports that research on ethnic diversity has been identified as a priority of future NPS recreation research.

USDI Bureau of Land Management

Since 1976 the Bureau of Land Management (BLM) has conducted only limited research on recreational use of its areas. In cooperation with the Wildland Recreation and Urban Culture project of the USDA Forest Service, the BLM has conducted visitor surveys on some of its sites in southern California. These studies have focused on differences in recreation

behavior and facility preferences between Hispanic Americans and Anglo Americans.

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) relies upon the National Survey of Fishing, Hunting, and Wildlife Associated Recreation, a household survey conducted every five years. This survey has typically collected data on race but not ethnicity. Despite this limitation, the USFWS survey is valuable because it is the only accessible longitudinal research on recreation behavior in the United States. For this reason, it is especially useful in describing changing trends in fisheries-related and wildlife-related recreation behavior. Gramann (1996) notes that the USFWS cooperates in social science research funded by other agencies in which wildlife refuges serve as research locations. One example is a survey of residents' perception of the Lower Rio Grande Valley National Wildlife Refuge in south Texas. This study examined differences between Anglos and Hispanics in their attitudes toward the refuge, as well as differences in the general environmental values held by these two ethnic groups.

Other Agencies

In general, non-Department of Defense (DoD) Federal agencies have used face-to-face visitor surveys, telephone household surveys targeted toward non-users, and cooperative agreements with university social science researchers as methods of data acquisition. With the notable exception of the Forest Service, these agencies have focused on race rather than ethnicity. Within the Corps of Engineers, recreation research has not had an explicit focus on ethnicity until the initiation of the Ethnic Culture and Corps Recreation Participation work unit. Despite this, race variables are sometimes included in Corps surveys although they have not been analyzed extensively. In addition to the recreation research conducted by ERDC, the Corps' Institute for Water Resources in Alexandria, VA, performs policy and economic studies which are often related to recreation and social aspects of water resources.

In the next several sections, two recommended methods for acquiring data on ethnic minorities' recreational needs, perceptions, and facility preferences will be explored. The first of these methods, focus groups, is a tool which has been developed to a high degree of sophistication in private industry marketing efforts. The second is a more traditional visitor survey instrument which could be used at an individual Corps project or in a larger regional area such as a Corps District.

Focus Groups

Background

Krueger (1988) provides a thorough review of the development of the focus group approach in applied research. He defines a focus group as "a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, nonthreatening environment." This discussion is conducted with approximately seven to ten people by a skilled interviewer. The discussion is relaxed, comfortable, and often enjoyable for participants as they share their ideas and perceptions. Group members influence each other by responding to ideas and comments in the discussion (Krueger 1988).

Focus groups evolved out of nondirective individual interviewing in the 1930s when social scientists began to have doubts about the accuracy of traditional information-gathering methods. They were concerned about the excessive influence of the interviewer and the limitations of predetermined closed-ended questions. Nondirective interviews used open-ended questions and allowed individuals to respond without setting boundaries or providing clues to potential response categories. They allowed the subjects ample opportunity to explain their responses and to share experiences and attitudes as opposed to the structured and directive interview that is dominated by the interviewer (Krueger 1988).

Applications

Since the end of World War II, most applications of focus group interviewing have been in market research. Focus group interviews allow producers, manufacturers, and sellers to understand the thinking of the consumers they wish to reach with their product. Focus group interviews are now regarded by many manufacturers as a crucial step in shaping the marketing strategy for their products. Krueger (1988) provides several examples of products which have undergone major revisions in manufacturing, packaging, or advertising due to findings of focus groups. In the world of marketing research, focus group interviews are widely accepted because they produce believable results at a reasonable cost. In the larger world, social scientists, planners, and educators also find it appropriate to use them when the goal is to explain how people regard an experience, idea, or event.

The focus group interview is a qualitative, rather than quantitative, research tool. Does this make it less credible? Not according to Krueger (1988:21), who notes:

For several decades, the pendulum of evaluation research has swung to the quantitative side with primary attention to experimental designs, control groups, randomization. This sojourn with numbers has been beneficial in that we have gained in our experimental sophistication, but it also nurtured a desire for more understanding of the human experience. Too often the quantitative approaches were based on assumptions about people, about things, or about reality in general that were not warranted.

In their recent overview of Native American leisure research, McDonald and McAvoy (1997:162) note that "given [Native Americans'] preference for the spoken word, the spiritual nature of interaction with people and the land, the sense of interrelationships, and the meaning given to sense of place, it appears that qualitative methods will be more successful at answering the [research] questions discussed here."

Relevance

If Corps of Engineers professionals want to improve their programs and services, they have to know how their customers view their existing programs. Focus groups can provide them with reliable and accurate information about perceptions, feelings, and attitudes, allowing them to see reality from the customer's point of view. The disparity between the world view and life experiences of the Corps' decision makers and managers and their Native American customers made the focus group approach particularly appropriate. The ERDC team for the 1997 Native American focus groups is shown in Figure 4.

In the next section the meeting notes from two Native American focus groups are presented. These focus groups were two of the most challenging of those conducted in 1997 but for very different reasons. The meeting notes are included here because Native Americans were deliberately not included in the 1999 test survey, and their perceptions, preferences, and concerns would not otherwise be included in a report which has its primary focus on the test results of a draft survey instrument. The fact that these data were not acquired through the administration of a survey instrument does not make them any less meaningful or valid. The focus group approach is a complementary method to traditional user surveys when it comes to ethnic minority groups.

Also, because many readers will have had no previous experience with this technique, these records will give them some idea of the dynamics of the focus group approach. Ideally, participation in a series of focus groups should be required prior to the implementation of this technique by any Corps project manager. The notes from these two focus groups serve to give the reader a taste of the total focus group experience. Further practical guidance on the use of this data acquisition method appears in a later chapter on guidelines for project managers.

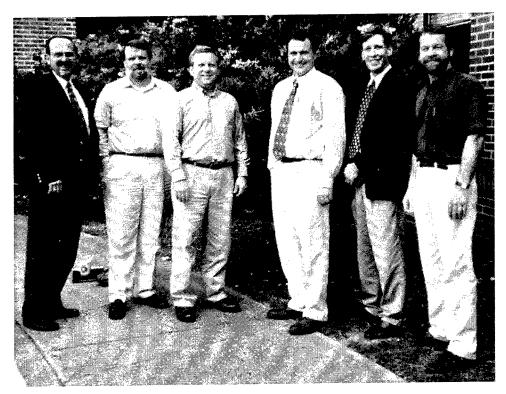


Figure 4. ERDC team for the 1997 Native American focus groups (L-R: Dr. Dale Brown (PMCL), Mr. Jim Henderson (ERDC original principal investigator), Mr. Bob Dunn (ERDC principal investigator), Dr. Erwin Rossman (Tulsa District), Dr. Tim Feather (PMCL), Mr. Dave Vader (Omaha District Tribal Coordinator))

The Oklahoma Native American Focus Groups

Three focus group meetings were held in the Tulsa District. The first was held in Muskogee, OK, on June 23, 1997 at the Bureau of Indian Affairs (BIA) office. The second was held in Pawnee, OK, at the Pawnee Tribal Headquarters on June 24, 1997. The third was held on June 25 in Anadarko, OK, at the Bureau of Indian Affairs Agency office. All three meetings were organized by Drs. Frank Winchell and Ed Rossman of the Corps Tulsa District, and were facilitated and recorded by Planning and Management Consultants, Ltd. (PMCL), of Carbondale, IL. The major findings and results of each focus group are presented in Dunn and Feather (1998). To better convey the dynamics of the focus group approach to data acquisition, the meeting notes from the Anadarko focus groups are presented below. This meeting was by far the most difficult of the Oklahoma focus groups because of the intense suspicion of the participants concerning the motives of the researchers.

The Anadarko Meeting Notes

Arrangements for securing the Anadarko focus group location and identifying attendees were handled by Dr. Frank Winchell of the Tulsa District and Joe Watkins (Choctaw Tribe) of the BIA. Figure 5 is a photograph of some of the meeting attendees. Representatives of eight tribes were invited to participate, of which nine attended. The tribes represented were Kiowa, Cheyenne/Arapaho, Western Delaware, Fort Sill Apache, Caddo, Comanche, Wichita, Apache, and Choctaw. Also, there were three representatives of the Forest Service in attendance. Many of the participants serve as members of a NAGPRA committee for tribes in western Oklahoma. These members are particularly sensitive to archeological curation and cultural resources management issues handled by the St. Louis District, and their concerns surfaced during this meeting. The meeting was informal, but the gathering of information was structured around two questions:

- (1) What outdoor recreation/leisure activities do Native Americans like to pursue?
- (2) What are some of your recreation/leisure experiences at Corps projects and what improvements or management actions could be taken to enhance those activities?



Figure 5. 1997 Native American focus group participants, Anadarko, OK

The participants were asked to create a picture or list of words that represented important aspects for Native American recreation/leisure at Corps projects, either existing or desired. The participants asked a series of questions at the beginning of the focus group. The tone of these questions was suspicious and skeptical. Past treatment by the government was a contributing factor to this line of questioning. However, after their questions were answered, they were willing to offer information, and a significant amount of discussion followed. There appeared to be a mix of educational levels among the participants, but almost all indicated strong attachment to Native American culture. The meeting lasted approximately 3 hours, and during that time the group generally appeared to grow comfortable with the focus group approach and the questions that were asked. This was verified by participant responses to the evaluation form given at the end of the meeting.

Welcome. Dr. Frank Winchell welcomed the participants to the focus group and introduced the sponsors and facilitation team. He noted that three such groups were being conducted in the Tulsa District. After explaining the goals of the groups, which is to learn more about recreation needs for Native Americans, he turned the proceedings over to Dr. Dale Brown.

Introductions/Visioning/Questions and Answers. Dr. Brown also welcomed the participants and followed up on Dr. Winchell's comments, explaining that the focus group is designed to get information from participants based on the introduction/visioning activity and two primary questions (listed above). Dr. Brown further explained that the facilitation team is neutral regarding the results of the focus groups, and is only concerned with hearing the participants' comments and insights on Native American recreation needs.

Dr. Brown began to introduce the visioning exercise to the participants. While he was preparing the participants, several of them asked questions regarding what has been done in the past to include Native Americans in Corps planning activities and what the purpose of the focus group was. Mr. Bob Dunn responded to the questions, noting that only a literature review of existing research on minority recreation and leisure practices has been done to this point. Mr. Dunn explained that the current research is being conducted in response to Executive Orders from the President to include minorities in planning for federal projects.

The participants requested information on the literature review report and any associated meeting notes taken for this focus group. Mr. Dunn said that this information would be made available, and Mr. Joe Watkins was designated as the point of contact for tribal members. Mr. Dunn indicated that this information would be sent to Mr. Watkins as soon as it became available. Further questions were asked about the focus group purposes, the timing of this effort, and if other minority groups were being contacted. Mr. Dunn responded that Native American focus groups are at the top of

the list and that other minority groups will be addressed through surveys over the next two years.

One participant noted that there are few, if any, Corps projects in this region of Oklahoma that are readily accessible to Native Americans, and that there are issues with the Corps regarding its treatment of the leasing of a Native American site/cemetery (Spiro area) by the state for recreational purposes. The participant stated that there have been no answers from the Corps about its actions and that apparently information is being withheld from Native Americans. No one has taken initiative to stop the development of these areas. Dr. Winchell from the Tulsa District responded that the area in question is a type of expanded museum facility and is on state land, but that the Corps would convey the feelings expressed during this focus group to the state. The Corps is trying to have this area designated as a protected historical site, he added, acknowledging the desire of Native Americans to make the site a cemetery again. The participants did state that, in general, the relationship between the Tulsa District and the tribes has been fairly good to this point.

Mr. Brown resumed the visioning activity, asking the participants to draw or write their recreational needs on a notecard as a record to work from during the focus group. The results of this notecard exercise are summarized below (tribal representation is listed in parentheses):

- (Wichita) There is a desire to hunt for species, even endangered ones, for ceremonial purposes. Also, it would be good if Native Americans were able to gather seasonal herbs, fruits, and nuts on Federal sites. The Corps probably doesn't have a lot of these plant species on site. But, it would be good to have the ability to transplant plant species at some of the project areas.
- (Choctaw) Native Americans like fishing, camping, swimming, and picnicking. Safe swimming areas are limited as is beach capacity. Also, there are few places to bring dogs.
- (Kiowa) Crappie fishing is a fun activity, especially at Fort Cobb. There were some docks to fish from until they flooded out and were washed away. The docks may not have been replaced after the flood. Wading during fishing is also a lot of fun. Docks are important since many Native Americans don't have boats. There is a channel in the same area where catching sand bass was fun. Without the docks, these areas could not be reached from shore.
- (Wichita) Corps-sponsored powwows are another activity that would be welcomed by Native Americans. A "49" is a form of social gathering, an informal gathering. It is a form of social dance, usually a type of unofficial gathering that sometimes occurs during powwows. It is very social, involving refreshments (usually alcoholic). There are certain songs sung (sometimes many times over during the night). Participants must be at least 15 years old to attend. A "49" is conducted after most typical powwow activities have concluded, starting around midnight. It can last until morning.

- (Wichita) Corps facilities close too early. Some Native American activities do not get started until later in the evening. Also, having a two- to three-day workshop about Native American culture in an area such as Arcadia Lake and interpreting what was found there would be very beneficial. Indian people generally don't see newspaper articles about the upcoming library speaker series. Interpretative programs oriented toward Native American culture would be very educational. Current levels of effort in this regard should be increased.
- (Comanche) Developing historical markers is important. Also, where the names of streams and lakes are posted in English, the respective Native American names (used by tribes historically found in the region) should be posted, as well as other natural land/water features.
- (Caddo) Hiking trails that connect various project features are a desirable means of examining what is available. Campfires are also fun. Adding in the Native American information for the area is a good opportunity to educate other cultures as well as Native Americans. Some people confuse Native Americans with Filipinos. Posting Native American information helps to reestablish the birthright of Native Americans, especially for those who have moved away to more urban areas.
- (Comanche) The ability to bring together big families at a Corps site to dance and camp would be good. Native American recreational activities can be loud, which may mean problems for others nearby. Having a natural area in which to set up teepees would cause less of a disturbance for other campers. Palo Duro Canyon in Texas offers great opportunities, being secluded and having historical importance as well.
- (Fort Sill Apache) Some Native Americans do not pursue active recreational activities, but will indulge in walking where there is no evidence of people (primitive areas). Interpretation of plants is important. Native Americans have good intertribal relationships because of our existing long-standing relationships on committees.
- (Comanche) Some Native Americans like fishing and camping. A lot of the park facilities have benches and grills, but they are too small, especially for the size of the gatherings we like to hold. Native Americans usually need to make large flame pits to cook for hundreds of people. This requires a lot of room. It doesn't fit the mold for small families, but our gatherings require a pit 3 feet deep and about 6 feet across.
- (Cheyenne/Arapaho) One of the participants asked for the definition of a Corps project and received the following response: Corps projects are designed to address specific issues such as flood control, recreation, or navigation. Projects in other areas are controlled by other agencies, such as the Bureau of Reclamation or the state. The Corps is conducting this effort to determine what recreation activities Native Americans like, regardless of where they choose to pursue them.
- (Cheyenne/Arapaho) Fishing, camping, hunting, hiking, horse riding, golf, and swimming are favorite activities, including their associated tournaments. Native Americans like to camp in teepees

- for three to four days. Canoeing is good also, whether for fishing or just spending time on the water. Hopefully, this information will be used to improve these opportunities for Native Americans.
- (Apache) Hunting, fishing, and swimming are less popular than in the past. Hunting nowadays is mostly for small game. Fishing is primarily bank fishing and swimming is primarily creek swimming because there are few lakes nearby. It seems as if the days of readily doing these activities are gone. There is a need to emphasize having primitive areas and camping areas for large groups. (Again, more questions were asked about what this effort will achieve.) White people don't seem to understand or know what Native Americans do, even those that have been living here for some time. They need to be educated.

Thematic Discussions. At this point the group (without an actual transition) went into addressing the two primary and related questions.

- There are facilities that Native Americans do not use because they are not wanted by some from other races. White people should know about Native American ways, and their lack of understanding makes things difficult for all involved.
- There is a need for interpretive information at sites. Having a Native American representative at Corps sites would help improve educational opportunities and assist in scheduling by tribes. Seeing another Native American face also makes Native American visitors more comfortable and alleviates the feeling of not being welcome at these sites.
- Tribes in western Oklahoma have less experience in dealing with Europeans than those back east. This experience dates back only 150 years. There is a mistrust of European types that still runs deep. There have been fewer opportunities and less time for tribes in this area to learn about European ways, including ways of economic development, when compared to tribes in the eastern United States. When information was needed about Native Americans in Washington, it was readily submitted until the tribes found that it was being used against them. Native Americans feel that the government will manipulate information for its use. Open fire pits that Native Americans traditionally use have been made illegal, and fees have to be paid to camp on lands that were owned by Native American tribes. Also, there are treaties that allow Native Americans to hunt and fish on a wide area of property, yet some properties designated by these treaties cannot be accessed by Native Americans. This issue has not been addressed to the satisfaction of the tribes.
- Another issue is the collection of plants and minerals from Federal lands. Regarding management plans for plants, animals, and minerals, there are times where the rights of Native Americans should supersede those of the state. Many Native Americans' rights have been violated. Some of the attendees said that they would be willing to work with the Corps in natural resources management.
- Dr. Brown asked if Native Americans have been working with the Corps regarding these issues. Participants responded that there has been a wonderful relationship with the Corps on issues, primarily

- those concerning cultural resources, that required the input of Native Americans. Over the last three or four years there has been much inclusion of Native Americans by the Corps, and the Corps has given the tribes lead time to prepare for these meetings (Wichita perspective). Communication is good so far.
- Native Americans have been getting more information about what is being done in the area. It has been a mixed blessing in that other agencies give tribal representatives historic management plans to comment on, and sometimes there is too much information to keep up with. Coordination generally is good, particularly with the Tulsa District, but there are some districts that are difficult to work with. (Caddo perspective)
- Dr. Brown asked if the tribes know who the Corps points of contact are for projects. The response was, in most cases, yes. Native Americans want to keep this dialogue going. However, the St. Louis District is perceived as being extremely difficult to work with in the eyes of many tribes in this region.
- Working with the Corps at its project areas would be beneficial for harvesting components of plant life such as leaves. Comanches use these leaves for medicine men and peyote (for religious services). The National Park Service has been very cooperative in helping to gather leaves, but this effort should be complemented by site visits to Corps project areas with Corps personnel. Tribal representatives would be willing to do site visits. This cooperation would provide better information to both the Corps and the tribes.
- There is constant contact with archeological entities from different states. Tribes try to coordinate internally, keep a network going for the Native American peoples, and draw upon other agencies that can help them.
- Depending on which tribe is running them, powwows can be intertribal. One tribe may have three or four celebrations in a year. Most have at least one annual event. Generally there is much singing and dancing with some visiting on the side. Powwows are held to honor someone, to celebrate something, to act as a fund-raiser, or just as a social gathering. They can be hosted by any person or group and can last from one day to a week. They can vary in size from 100 people to several thousand. Some powwows include food vendors, and some provide food free of charge. The Corps could host a powwow, given a large flat area and a lot of water to draw upon. Shade areas, including arbors, sanitary facilities, electricity, and dance areas, are key for these events. Many powwows are held in the summer, with some on holidays. Tribes tend to not hold them in the winter when it is snowing. There are competitive dance competitions, but it is an inclusive social gathering. The hosts try to provide a meal a day within an encampment. Powwows are a major logistical effort for the committee that organizes and funds them. The state arts council will sometimes provide funds.
- Do facilities currently exist to hold these large gatherings? Yes, with the assistance of porta-johns. Powwows normally last from late afternoon to midnight. Money for admission fees is an issue as is having enough time off from work to come to the powwow. The winter events are one-nighters. Non-Native Americans are welcome.

- Do Corps facilities maintain information on powwows? No, not that the tribes are aware of.
- Ceremonial dances are held sometimes and large campouts accompany these gatherings. Non-Indians living in the region often don't know about them, though they are very popular in areas like Oklahoma City. Even congressional representatives do not seem to know about the tribes and tribal activities.
- Not all tribes have powwows; some hold more traditional gatherings. However, most of these are open events, especially the contests. The closed ones are generally not advertised, and attendees cannot bring recording equipment of any kind. Stomp dances are also different from powwows, although they are sometimes lumped into the same category. Also, there are certain dance events that would not necessarily be part of a powwow and are simply called dances.
- If the Corps sponsored a powwow, it should be open to all, and communication for its planning needs to be open as well. It should also be held in a large flat space.
- Normally, there is not a charge for powwow activities. The Corps should not charge unless it is fund-raising for a good cause, like a scholarship. Entry fees should generally be a last resort. Sometimes raffles are held during the powwow, but again there is not an entry fee.
- Who takes care of the clean-up? Usually the sponsoring committee and their families. If the Corps wants to plan a powwow, they should coordinate with some of the tribal representatives. Perceptions of powwows differ depending on which side of Interstate 35 a person lives.
- Ideally, recreational facilities for Indians would be different than what typically exists. There are few Native Americans attracted to RV areas and golf courses. Perhaps a question should be asked about what the development of a facility for Native Americans would be like. There are not many Native American golfers. Also, can something be made "Indian friendly"?
- Adding informational signs about features at sights would be a good start. Also, Corps interpretive centers should draw upon more support from Native American tribes. Native Americans can learn from and about other Native Americans. There is a sense of shared pride. Tribes want to include consultation about these things at Lake Meredith. Also, these interpretive centers could have a presentation once a month and promote it with flyers. There are tribal historians who could give lectures, and archeologists who could talk, present slide shows, or do writeups. This, of course, would require bringing in some new people to the Corps. Some of this may not be part of the Corps mission, but the information involved is important since some people are not aware of which tribes were part of what lands at what times.
- Correct interpretations of tribal cultures are important. They provide educational support and enhance project areas. Tours could be arranged, with emphasis placed on battlefields and skirmish sites.

- It seems to many Native Americans that the tourism board of Oklahoma only realized there were Indian tribes in western Oklahoma within the last 18 months. Now the state wants to develop battlefield sites and skirmish areas. There is a lot of history in this area. A lot of the history has happened on restricted property, which makes it difficult to develop.
- Canton and Waurika are two nearby Corps projects seldom visited by the tribes in this area. Roman Nose (not a Corps project), to the north, has facilities that are utilized more often by area tribes.
- It was asked what can be done to make Corps project areas more Native American and other-minority friendly. Mr. Dunn noted that only small steps can be taken through the focus group effort, and that the Corps is going to conduct face-to-face interviews with individuals from the other minority groups.
- Participants asked if they were going to be invited to a Corps facility
 to see it first-hand. Representatives from the Tulsa District indicated
 that they will look into the possibility of arranging such a visit.
 Mr. Dunn indicated that the report resulting from this effort is for
 lake managers at Corps districts. ERDC will provide managers for
 the information, and it will be implemented on a district-by-district
 basis.
- A representative from the U.S. Forest Service addressed the issue of recreation-space problems. Forest Service recreation areas have been developed for single-family groups. Generally the Forest Service's existing facilities are not large enough to support other minority recreation needs. The Forest Service could benefit from this study, but does not have the resources to perform such a study itself. The Forest Service typically has managed its recreation areas by assumption. Some Forest Service plans for Native Americans (Apache) have been implemented because Native Americans approached them initially.
- An Apache run/race is being conducted as part of drug and alcohol awareness during the third week in September. Participants will run from as far away as New Mexico to here in Oklahoma.

Summary/Closure/Evaluation. In his closing comments, Mr. Dunn noted that Native Americans have rights to recreation facilities just like other Americans, which is why these studies are being conducted. The ERDC research team, he said, has found that there is a need for arbors and other features at Corps facilities. The information being gathered through these focus groups will be used to tell the government all that is needed. The Corps will make this information available to the study participants.

One of the participants noted that using only Native Americans as an indicator for this study may not be appropriate because of the different mindsets and desires of each culture/minority. The values of white society are different from those of Native Americans. Traditional Native Americans want to be part of the land, not part of a higher economic tax bracket. Mr. Dunn noted that the focus groups were specifically developed for Native Americans and that they will not be organized for other groups. However, other groups are being surveyed to determine their recreational

needs. One of the participants stated that efforts such as this can be superficial, noting that even treatment of alcoholism for Native Americans is not addressing the causes, merely examining the symptoms.

Participants noted that some military personnel attending one workshop did not help matters regarding the overall consultation process with Native Americans. The workshop was oriented toward tribes getting access to Native American burial sites on installations. The attitude conveyed by the military personnel seemed to be that Native Americans themselves get in the way of these efforts. This sort of treatment does not give the tribes any hope for dealing with Federal agencies.

Participants asked if Native Americans from other geographic regions will be examined. Mr. Dunn answered that some tribes in the north-central United States will. Information will be gathered from other regions through Corps districts on the east and west coasts. The goal is to design Corps projects to be more user-friendly to Native Americans. The study team was not able to contact all of the tribes in this region due to budgetary constraints, but their input is wanted.

Participants noted that there are some interpretive centers in place at Corps projects, but they are geared toward non-Native Americans. Also, having guest visitors and inviting other tribes into areas they used to occupy would be beneficial.

Dr. Brown distributed evaluation forms to the participants and thanked them for their involvement. While the participants completed the evaluation forms, Dr. Ed Rossman made some closing comments regarding the efforts of the focus group. He noted that this is part of a nationwide effort, but emphasized to the participants that the Tulsa District has special initiatives for coordinating with Native Americans. Dr. Rossman then provided packets to each attendee regarding Corps projects in the region and some lake brochures that participants could place in tribal offices. He noted that tribal information could be made available in Corps offices as well, and invited participants to contact him at the Tulsa District as additional recreation and development ideas came to them. He also indicated that it would be possible to go to a Corps site as part of a field trip. Following these comments, Dr. Brown brought the meeting to a close.

The South Dakota Native American Focus Groups

Three focus groups were organized in the Omaha District. The first met in Pierre, SD, on July 21, 1997 at the Governor's Inn and consisted of a group of "urban Indians" from a number of reservations in South Dakota. The second was held July 22 at Fort Thompson, SD, at the Corps' Big Bend Dam resident office, which is adjacent to the Crow Creek Sioux reservation. The third was held July 23 at the Youth Center of the Swift Bird community on the Cheyenne River Sioux reservation on the western shore of Lake Oahe. All three meetings were organized by Mr. David Vader, Tribal Coordinator for the Omaha District, and Ms. Jeannine Nausse (Omaha District Operations Division). All three meetings were facilitated and recorded by PMCL. The major findings and results of each focus group are presented in Dunn and Feather (1998). The Swift Bird focus group meeting was particularly heart-wrenching due to the extreme poverty of the group and the attitude of defeat which permeated the discussion. The meeting notes are presented here to show the give and take between facilitator and participants which is essential for successful data acquisition.

The Swift Bird Meeting Notes

Arrangements for securing the focus group location and identifying attendees were handled by David Vader of the Omaha District, who coordinated with Joan LeBeau and Karen Nitzschke of the reservation staff. All seven of the participants represented the Swift Bird community. The meeting was informal, but the gathering of information was structured around the two questions posed to the Oklahoma focus groups:

- (1) What outdoor recreation/leisure activities do Native Americans like to pursue?
- (2) What are some of your recreation/leisure experiences at Corps projects and what improvements or management actions could be taken to enhance those activities?

The participants were asked to open the focus group with descriptions of their recreation and leisure habits as a means of introducing themselves and shedding light on Native American recreation/leisure at Corps projects, either existing or desired. The group then entered into a free-flowing discussion of issues surrounding the two questions. The participants were very willing to offer information. Some had much more to say than others. The tone, while generally friendly, was fairly reserved and occasionally suspicious. The participants displayed a somewhat defeated attitude about recreation opportunities in the area. The meeting lasted about two hours, and during that time the group appeared very comfortable with the focus group approach and the questions that were asked. This was verified through the participants' responses on the evaluation forms given at the

end of the focus group. Some participants came and went during the course of the meeting, and some had to attend to children. However, this did not appear to distract from the focus of the session.

Welcome. Mr. Dave Vader opened the session by describing the research at ERDC as a means of better understanding the recreation and leisure time spent by Native Americans. This information, he told participants, will be used by the Corps and other agencies in the development and enhancement of recreation sites. Currently, the Corps is involved in making improvements at the Rousseau Creek recreation area, Mr. Vader said, adding that the information received at these focus groups would be used to address those improvements. Mr. Vader then went on to introduce the rest of the research team.

Mr. Bob Dunn elaborated on the ERDC recreation research effort. He cited Executive Orders from the Clinton Administration concerning the creation of a better government that focuses on customers and environmental justice. This research, which is a multiyear effort, will help the Corps better understand the recreation needs of ethnic groups, said Mr. Dunn.

Introductory Statements and Discussion. Dr. Dale Brown introduced the facilitation team. He indicted that this meeting process had been carried out at two other sessions in South Dakota. Dr. Brown stressed that the research team was there to listen, record, and lead the group in an unbiased and neutral way, and that the information being collected was important to the Corps for managing recreation sites.

Dr. Brown led the participants through the visioning exercise. He asked them to create drawings on the cards in front of them of the leisure and recreation-type activities that Native Americans like to pursue. Participants were encouraged to make a list of words instead of a drawing if they preferred. Following the visioning exercise, Dr. Brown asked the participants to introduce themselves and present what they had drawn or written. Participant responses were as follows:

- Swimming, fishing, and camping are important recreation activities. One participant takes 12 children to the lake every day to swim and fish. The children like swimming in an area that has a hard bottom.
- Picnicking, hiking, and campfires at clean and well-maintained facilities are important. There have been problems with the performance of some maintenance contractors at local recreation areas.
- Another respondent likes to participate in archeological digs, to go fishing and boating, and to take the children swimming. However, children like to jump off the boat ramps and swim around them, which presents a dangerous situation when boats are pulling in.
- Spending time looking at nature and fishing are important leisure and recreation activities.
- One participant echoed similar recreation preferences (adding hunting to the list), and indicted that he visits recreation sites in surrounding areas. He said it would be nice if more sites were

developed on his tribe's side of the lake (the reservation)—sites with shaded areas, picnic tables, etc., more like those at the west Whitlocks recreation area run by the state. He noted that there appears to be quite a bit of red tape involved with the development of areas along the lake, which inhibits development of new sites.

- Cultural activities are important for Native Americans, including those that require wood for fires. Some Native Americans participate in sweats (sweat lodge ceremonies) and like to jump in the water/lake immediately afterward.
- Swimming, camping, and volleyball are common recreation activities, as is badminton. The west Whitlocks area is nice because it has volleyball courts, swimming areas, and bathrooms.

Dr. Brown then moved the group into a discussion of topics related to the two main questions mentioned earlier as well as the topics raised in the visioning exercise.

What are issues concerning swimming areas?

- Safety is very, very important. There need to be designated swimming areas that do not conflict with the other recreation activities in the immediate area. Swimmers need to know how far out they can go in the water before it gets deep.
- Children love to swim. They swim, get muddy, then jump in the water. They also like boat and jet ski rides.
- General maintenance of the areas is important. Many of the areas have smelly dumpsters and bathrooms that are not well maintained or which are typically full.

What is needed at lakeside picnic areas?

• Many picnic tables are needed on the holidays. Weekends are fairly busy also. Some people travel fairly significant distances to the local recreation areas on the lake (e.g., Eagle Butte).

What do Native Americans like to do for outdoor recreation?

- Powwows are very important and popular, although Native American hallowed grounds are in very poor condition.
- Powwows were held regularly for a few years, but enthusiasm and organization have diminished. It takes money to run a good powwow. Developing an area for powwows down by the river would be beautiful. The area would need to have an arbor for dancing, and a 5-ft pit to cook meals. One hundred people might come to the powwow, but this is a very low number compared to surrounding powwows which are steadily growing in attendance. These usually last three days: some people camp at the powwow, some drive back and forth. Non-Native Americans also attend. In general, most people camp with tents and pop-up campers. At these times, better access to water and shower facilities is needed. In the past, rented portable toilets have been used.

- In the winter Native Americans fish, hunt, ice skate, and sled. They also like to go to the salmon runs.
- Softball, basketball, and volleyball are all very important and common recreation activities. Children should spend time playing basketball and other activities instead of jumping off the bridge into the lake. People come from all around to jump off the bridge.

What would distract the kids from jumping off the bridge?

• Provide them with quality alternatives. West Whitlocks campgrounds are of excellent quality. Mobridge has places to swing and climb, including an obstacle course. Softball games also give the kids something else to do.

Does the Corps know when powwows are held?

• Some of the bigger powwows are advertised widely. However, they simply don't involve the Corps because they are not held on or near any Corps facilities. The facility (e.g., camping, bathrooms) needs are driven by the location of the powwow.

The discussion was laced with comments related to the participants' perspectives on racial differences and stress.

- There is a Corps facility at Mobridge, but Native Americans don't feel comfortable there because it is mainly run and attended by white people. There is no eye contact made, Native Americans feel embarrassed, a condition which they term "bucky." Also, Native American kids have not been exposed to many black people. There is not really much of a problem, except with whites.
- Native Americans essentially do not cross the river; they don't really associate with the Corps and other white people. There is a general discomfort. Most whites think that the state does everything that is good and the Native Americans do all that is bad. The perception by most whites is that those fisherman who make a mess are the Native Americans, not the whites.
- Some of the whites are nice to the kids, but others present problems.
- If new facilities were developed, the participants would want them to be primarily for Native Americans. Their experience has been that when some type of development happens, white people come in and take over. They want to make sure the tribe benefits, even if it means keeping whites away. Whites could spend money at these areas, but not take over.
- Some people do not understand Native Americans. They can't seem shake the image of "savages."
- A person interviewing for a teaching position at a school on the reservation was planning to live in Gettysburg. When the intended landlord heard that this person was going to work at the reservation, the landlord doubled his rent, and the person turned down the job. City people seem to be simply interested in making money off the Native Americans, who are seen as a potential source of revenue.

The facilitator asked several more questions:

What can the Corps do to help?

- Build a facility on this side of the lake. Allow for a gas and bait shop on this side where boats could be rented and docked. The development really needs to be on this side of the river. Most people just drive through, look, and take pictures because they are touring. They like to look at Native American people and the buffalo.
- There is a concern for passing on the culture, but Native Americans are reluctant to open some of their cultural activities for public viewing.
- One possibility might be buffalo-related programs that included tours.

Who would take care of these sites?

- Native American people could be hired. There are programs and partnerships in which wages could be shared. There is a lot of talent in this community (e.g., fishermen, hunting guides).
- Participants would prefer the Corps manage their sites instead of the state. If Native Americans worked at the sites, there would be more tribal enthusiasm for those areas. More Native Americans would come, and they would feel more comfortable.
- Church groups come through every year, but they tend to spend most of their time and effort in town instead of in the small tribal communities.

What improvements should be made?

- Build facilities on the Cheyenne River where tribes can have convenient access. They would like to take the kids camping at good facilities, like those at west Whitlocks.
- It would be nice if there was a fence to keep livestock from going into recreation areas.
- The reservoir water level is a problem for some.

Summary/Closure/Evaluation. The representatives from the Corps made the following closing comments:

The information from this focus group will be made part of the current Master Planning efforts by the District. For example, they want to consider a redesign of Rousseau Creek that will provide access to the lake. The Corps representatives will use the information from this focus group right away. While some of the information may appear trivial, the Corps is moving in a direction to support the needs of Native Americans. The Corps representatives encourage Native Americans to move forward on Rousseau Creek and Old Agency planning and development. Design and management of Corps recreation areas have been done for whites historically, with little knowledge of or consideration for ethnic minority groups. The land

may be returned someday, but something has to be done to it first. Even if the state maintains the land, there is a role for Native American input on the planning side. Stay in close touch with the Omaha District.

The participants were thanked for their time and input and asked to fill out evaluation forms as they left the meeting.

Development of the Draft Survey Instrument

Initial Questions

All six Native American focus groups were structured around two central questions which together provided the framework for a variety of follow-up questions in a free-flowing discussion. Again, the two primary questions were these:

- (1) What outdoor recreation/leisure activities do Native Americans like to pursue?
- (2) What are some of your recreation/leisure experiences at Corps projects and what improvements or management actions could be taken to enhance those activities?

In developing the draft survey instrument, the two central questions which structured the Native American focus group discussions became two data acquisition categories. Question 1 became a category dealing with general outdoor recreation style. Questions included in this category were those that would most likely be asked as follow-up questions in a focus group format. In a brainstorming exercise, twenty-five questions were generated for the category dealing with outdoor recreation style. Question 2 became a category dealing with recreation participation at Corps of Engineers projects. Twenty-five question were again prepared using the same brainstorming technique that would most likely be asked as follow-up questions in a focus group discussion.

In developing specific questions for each category, careful attention was paid to the three research themes for ethnicity research defined by Gramann (1996). These themes include:

- Underparticipation and Underutilization
- Outdoor Recreation Style
- Acculturation and Recreation

An attempt was made to solicit information that would contribute to corporate knowledge in all three research areas. Questions were developed to identify the minority group's level of acculturation (e.g., language abilities), their specific recreational preferences (e.g., ethnically distinctive recreation activities), and a variety of possible reasons for underparticipation (e.g., transportation problems, perceived discrimination, safety concerns, etc.). Questions regarding average group size were included to determine whether they fit existing Corps facilities. In addition, several open-ended questions were added to solicit an assessment of the Corps' performance in providing quality customer service.

Following coordination with other researchers in the Environmental Laboratory, the necessity for brevity and elimination of redundant questions became obvious. Fifty questions were far too many for a survey which would eventually be reviewed by OMB to determine the burden the survey imposed upon the visiting public. With this in mind, the draft survey was reduced to the thirty questions listed below. Length of time to administer the survey was estimated to be approximately ten minutes.

Category 1: Outdoor Recreation Style

- 1. What are your favorite forms of outdoor recreation?
- 2. Are your favorite forms of outdoor recreation ones that most Americans also enjoy?
- 3. Do you like to take your children and/or parents with you when you recreate?
- 4. What is the average size group you bring to the Corps lake when you visit?
- 5. Do you prefer primitive camping areas or campgrounds with developed facilities and services (electrical hook-ups, toilets, etc.)?
- 6. Do you think that the Corps should preserve wild/undeveloped areas around its lakes whenever possible?
- 7. What forms of outdoor recreation might you wish to try in the future?
- 8. Do you have friends or associates with different racial or ethnic backgrounds?
- 9. Do you work with people with different ethnic/racial backgrounds?
- 10. Do you enjoy recreating with people from different ethnic/racial backgrounds?
- 11. Do you (or members of your family) have difficulty understanding the signs posted at Corps lakes?
- 12. Do you have difficulty understanding the verbal instructions of Corps rangers when you visit a Corps lake?
- 13. Do you speak more than one language? If so, how many?

- 14. Do you consider yourself bilingual (fluent in two languages)?
- 15. Are your children fluent in more than one language?

Category 2: Recreation Participation at Corps Projects

- 16. How often do you visit Corps lakes?
- 17. Would you like to go more often? If yes, what would help you go more frequently?
- 18. How long does it take to travel to your favorite Corps lake?
- 19. Do you have a transportation problem that hinders your going to Corps lakes as often as your would like?
- 20. What water-based recreation activities do you participate in at Corps lakes?
- 21. What other outdoor recreational activities do you participate in at Corps lakes (e.g., picnic, softball, etc.)?
- 22. What activities would you like to have at Corps lakes that you do not have now?
- 23. What facilities would you like to have at your favorite Corps lake that you do not have now?
- 24. Do you feel safe when visiting a Corps lake?
- 25. Do you feel that the Corps managers and rangers want you visiting the Corps' lakes? Do you feel welcome?
- 26. Do you ever visit interpretive displays about natural or cultural resources at Corps lakes? Do you enjoy nature trails?
- 27. Do you feel comfortable with people from other racial or ethnic groups who are also recreating at the Corps lake(s) when you visit?
- 28. Have you felt discriminated against because of your racial/ethnic background at a Corps lake?
- 29. Do you think that the Corps is doing all it can in providing a quality recreation experience for minorities?
- 30. How could the Corps improve its recreational facilities for your family's enjoyment in the future?

As directed by the 1995 Plan of Study, the next step in the development of the survey instrument was to pre-test the questions among the three minority groups that would actually be surveyed. Based on recommendations in Gramann (1996) and other sources (e.g., McDonald and McAvoy 1997), Native Americans would not be formally surveyed. To pre-test the

questions, focus groups were planned for the spring of 1998 with African, Hispanic, and Asian American groups. The focus groups would be conducted at the same lakes where the survey instrument would be formally tested in 1999.

The Pretest Focus Groups

Four focus groups were conducted in 1998 at Woodruff Lake, AL (African American), Carlyle Lake, IL (African American), Canyon Lake, TX (Hispanic), and Hensley Lake, CA (Asian). All the meetings followed the format of introductions, discussion of research, administration of the survey instrument, and an open discussion of the group's responses. The time it took to administer the survey was closely monitored. The total time allotted for the focus group was about two hours. Figure 6 is a photo taken at the Canyon Lake focus group session.

The survey questionnaire consisted of two sections each containing fifteen questions. The first section dealt with Outdoor Recreation Style in general, and included a series of questions on favorite forms of recreation, the average size of groups, preferences for recreating with family members, preferences for types of camping facilities, forms of outdoor recreation participants might wish to try in the future, experience recreating with members of other ethnic/racial groups, and language skills and ability to understand signs and verbal instructions at Corps projects. The second section of the questionnaire focused on Recreation Participation at Corps Projects. Questions in this section sought to elicit information on the



Figure 6. Ranger Dave Quebedeaux with Hispanic American focus group participants at Canyon Lake, TX

frequency of visits, hindrances to visiting Corps facilities such as transportation problems, preferences for water-based recreation at Corps lakes, desired facilities not currently available, safety concerns while visiting Corps projects, preferences for interpretive displays about natural and cultural resources, level of comfort with other ethnic/racial groups recreating at Corps projects, experiences with discriminatory behavior at Corps projects, and the Corps' overall efforts to provide a quality recreation experience to its minority visitors and areas for improvement.

The results of these focus groups are detailed in the four Tech Notes and will be discussed and compared with the results of the 1999 test survey in a later section. Several observations from these focus groups can be made which are related to methodological issues. First, at 30 questions the draft survey was still too long to be administered during a reasonable length of time. During the first phase of the pretest focus groups, the time it took to administer the survey instrument ranged from 15 to 20 minutes. The survey would need to be reduced to twenty or so questions to fit the goal of a ten-minute personal interview. Also, the questions relating to language ability would have to be revised. During the two focus groups with African Americans, these questions made the participants quite uncomfortable. Not only were they just not appropriate for most black respondents, they were interpreted as a subtle "put-down" of their ability to speak English. Third, there was still some redundancy between the questions in category 1 and category 2. These problems would likely be resolved during the OMB review process.

OMB Revisions and Approval

In April 1999 OMB revised the 30-question draft survey instrument used for the 1998 focus groups to just 19 questions and reformatted the question dealing with linguistic ability to require follow-up questions only if English was not the respondent's primary language. The OMB-approved (no. 0710-0001) survey questions became these:

Category 1 Outdoor Recreation Style

- 1. What are your favorite forms of outdoor recreation?
- 2. What is the average size group you bring to the Corps lake when you visit?
- 3. Do you prefer primitive camping areas or campgrounds with developed facilities and services (electrical hookups, toilets, etc.)?
- 4. Do you think that the Corps should preserve wild/undeveloped areas around its lakes whenever possible?
- 5. What forms of outdoor recreation might you wish to try in the future?

6. Is English your primary language?
6a. If not, what is your primary language?
6b. If not, do language problems make it difficult for you or members of your family to understand the signs posted at the lakes?
6c. If not, do language problems make it difficult for you or members of your family to understand the verbal instruction of Corps rangers at the lakes?

Category 2 Recreation Participation at Corps Projects

- 7. How often do you visit Corps lakes?
- 8. How long does it take to travel to your favorite Corps lake?
- 9. Does lack of public transportation prevent you from visiting Corps lakes as often as you would like?
- 10. What water-based recreation activities do you participate in at Corps lakes?
- 11. What other outdoor recreational activities do you participate in at Corps lakes (e.g., softball, etc.)?
- 12. What activities would you like to have at Corps lakes that you do not have now?
- 13. What facilities would you like to have at your favorite Corps lake that you do not have now?
- 14. Do you feel safe when visiting a Corps lake?
- 15. Do you believe that the Corps managers and rangers make you feel welcome at Corps lakes?
- 16. Do you ever visit interpretive displays about natural or cultural resources or enjoy the nature trails at Corps lakes?
- 17. Have you felt discriminated against because of your racial/ethnic background at a Corps lake?
- 18. Do you think that the Corps is doing a good job of providing quality recreation for minorities?
- 19. How could the Corps improve its recreational facilities for you family's enjoyment in the future?

After a careful review of the OMB-approved questionnaires (OMB number 0710-0001), the author requested approval to add the following three questions to the category one section of the Ethnic Minority User Survey:

- How many people are in your group today? ____total How many: ___males ___females ___under 16 (Source: Camper Customer Satisfaction Survey question 4)
- What do you find attractive about this site/lake? (open-ended format)
 - (Source: Recreation Site Survey question 25)
- What do you find unattractive about this site/lake (open-ended format)

(Source: Recreation Site Survey question 26)

In addition, a request was included to add the follow-up question "Why?" to OMB's questions 14, 15, 17, and 18 in the approved Ethnic Minority User Survey to avoid simple yes/no responses.

These modifications were approved by OMB on May 5, 1999, and the survey was distributed to the five study lakes during the week of May 15, 1999 by the author and Mr. David Quebedeaux, ranger at Canyon Lake and liaison with the two California projects during FY99.

5 Results of the 1999 Testing of the Survey Instrument

The draft survey instrument administered during the 1999 field season at Woodruff, Carlyle, Canyon, Pine Flat and Hensley lakes is shown below. Figures 7-13 are maps of these areas and photos taken during administration of the survey at each site. Tables AF#1-22, HS#1-21, and AS#1-22 contain the survey questions asked of each group of participants.

OMB 0710-0001 Expires 31 March 2002

Ethnic Minority User Survey

Date	Reservoir
Time	Day Use Area
Boat Ramp	Honor Box
Beach Area	Attended Gate
Camping Area	
nority recreation visitors to Clearning about your outdoor also like to ask for your opinieral are being managed. Wou answer some questions." (If yof the Corps' facilities and mresponses are confidential." (Note to Interviewer: please	. I am conducting a survey of mi- Corps of Engineers projects. We are interested in recreation habits and preferences and we would ions and perceptions of how Corps lakes in gen- ild you be willing to take about ten minutes to yes) "We are trying to get an honest assessment anagement style, so please know that all your record the following observations concerning approximate age, type of group inicity/ subgroup)

Category 1: Outdoor Recreation Style					
1. What are your favorite forms of outdoor recreation?					
2. What is the average size group you bring to the Corps lake when you visit?					
3. How many people are in your group today?total					
How many:malesfemalesunder 17					
4. Do you prefer primitive camping areas or campgrounds with developed facilities and services (electrical hook-ups, toilets, etc.)?					
5. What do you find attractive about this site/lake?					
6. What do you find unattractive about this site/lake?					
7. Do you think that the Corps should preserve wild/undeveloped areas around its lakes whenever possible?					
8. What forms of outdoor recreation might you wish to try in the future?					
9. Is English your primary language?					
9a. If not, what is your primary language?					
9b. If not, do language problems make it difficult for you or members of your family to understand the signs posted at the lakes?					
9c. If not, do language problems make it difficult for you or members of your family to understand the verbal instructions of Corps rangers at the lakes?					
Category 2: Recreation Participation at Corps Projects					
10. How often do you visit Corps lakes?					
11. How long does it take to travel to your favorite Corps lake?					
12. Does lack of public transportation prevent you from visiting Corps lakes as often as you would like?					

13. What water-based recreation activities do you participate in at Corps lakes?
14. What other outdoor recreational activities do you participate in at Corps lakes (e.g., picnic, softball, etc.)?
15. What activities would you like to have at Corps lakes that you do not have now?
16. What facilities would you like to have at your favorite Corps lake that you do not have now?
17. Do you feel safe when visiting a Corps lake? Why?
18. Do you believe that the Corps managers and rangers make you feel welcome at Corps' lakes? Why?
19. Do you ever visit interpretive displays about natural or cultural resources or enjoy the nature trails at Corps lakes?
20. Have you felt discriminated against because of your racial/ethnic back ground at a Corps lake? If so, please explain.
21. Do you think that the Corps is doing a good job of providing quality recreation for minorities? Why?
22. How could the Corps improve its recreational facilities for your family's enjoyment in the future?

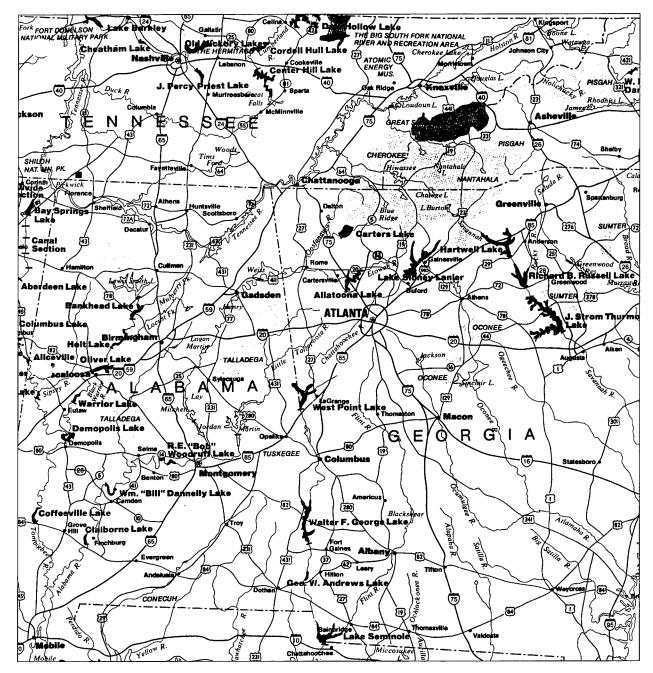
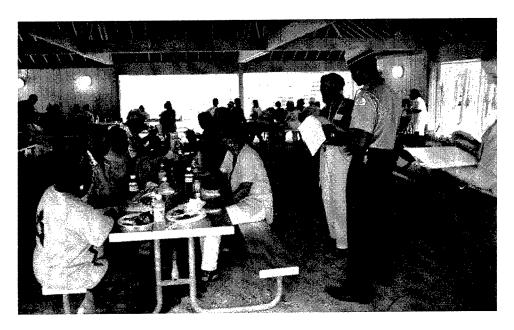


Figure 7. Regional map showing location of Woodruff Lake, AL



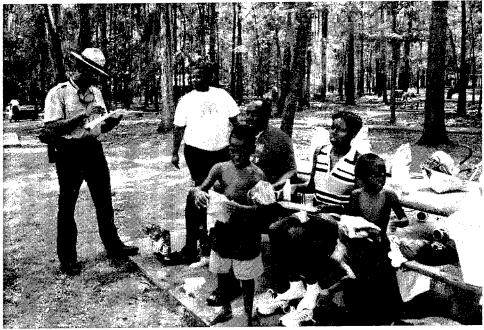


Figure 8. Administration of survey instrument at Woodruff Lake by Rangers Myers Hawkins and Theodis Williams





Figure 9. Administration of survey instrument at Woodruff Lake by Rangers Myers Hawkins and Theodis Williams

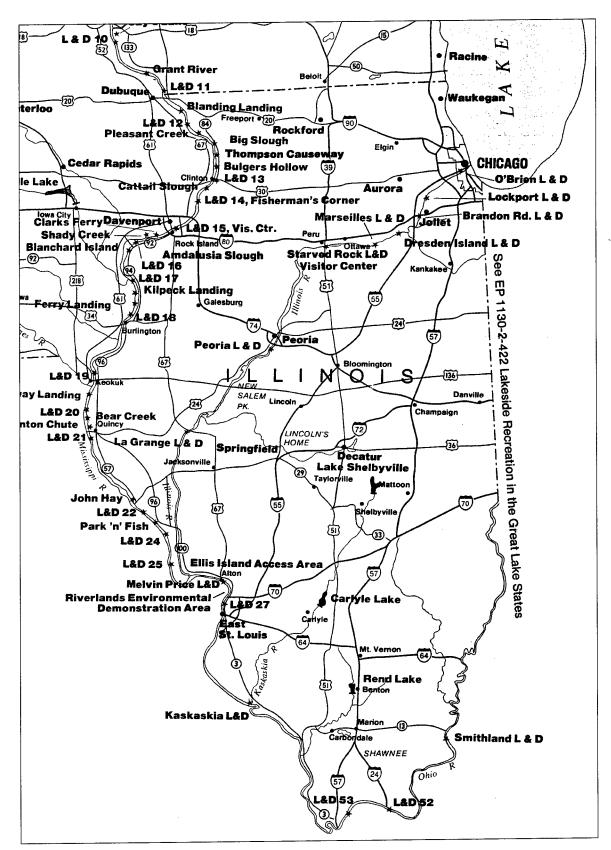


Figure 10. Regional map showing location of Carlyle Lake, IL

African Americans

	Carlyle (113)	Woodruff (90)	
Swimming	31	19	24.63 percent
Camping	11	2	6.40 percent
Fishing	62	27	43.84 percent
picnic/cookout/barbeque	19	34	26.11 percent
Boating (general)	14		6.90 percent
Boating (Personal Water Craft)	1		0.49 percent
Hunting	3	8	5.42 percent
Water ski	2		0.99 percent
Volleyball	4	11	7.39 percent
Sightseeing/Tours		1	0.49 percent
Hike	5	4	4.43 percent
Soccer	1	,	0.49 percent
Basketball	1	13	6.90 percent
Football	1	3	1.97 percent
Baseball/Softball	5	11	7.88 percent
Relaxing	3	3	2.96 percent
Golf	1	3	1.97 percent
Tennis	1		0.49 percent
Other	5	2	3.45 percent

Table AF#2 What is the average size group you bring to the Corps lake when you visit?						
	Carlyle (115)	Woodruff (90)	All Projects (205)			
Average	29.28	6.61	16.56			
low	1	1	1			
high	200+	50	200+			

How many:malesfemalesunder 17						
	Carlyle (115)	Woodruff (90)	All Projects (205)			
Average	5.90	19.14	11.72			
low	1	2	1			
high	50	200	200			

Table AF#4 facilities and	Do you I servic	ı prefer primi es (electrical	tive camp hook-ups	ing areas or ca , toilets, etc)?	mpground	s with developed
	Carly	/le (95)	Woodruff (51)		All La	kes (146)
Primitive	20	21.05%	10	19.61%	30	20.55%
Developed	75	78.95%	41	80.39%	116	79.45%

	Carlyle(112)	Woodruff (86)	
swimming area	15	25	20.20 percent
picnic/camp sites	3	7	5.05 percent
fishing	30	7	18.69 percent
peacefulness	12	12	12.12 percent
scenic beauty	17	11	14.14 percent
trees	3	6	4.55 percent
shade	4	12	8.08 percent
convenient location	9		4.55 percent
water	13		6.57 percent
restrooms	2	2	2.02 percent
Low crowding	6	2	4.04 percent
size of lake	7		3.54 percent
cleanliness of lake	10	10	10.10 percent
cleanliness of park		9	4.55 percent
well kept condition of park	9		4.55 percent
other friendly people	4	1	2.53 percent
Other	21	13	17.17 percent

	Carlyle (90)	Woodruff (106)	
swimming area size/condition	1	4	2.55 percent
picnic/camp sites	1	6	3.57 percent
nothing	42	42	42.86 percent
crowding	6	3	4.59 percent
nsufficient parking		1	0.51 percent
inconvenient location		3	1.53 percent
fee		2	1.02 percent
litter	7	2	4.59 percent
oor fishing	5	4	4.59 percent
nandicapped accessability	2	1	1.53 percent
neight of grass		9	4.59 percent
dead fish	4		2.04 percent
restrooms	4	1	2.55 percent
ack of drinking fountains		3	1.53 percent
pest insects	3	5	4.08 percent
vater	12		6.12 percent
ntoxicated/rowdy visitors	7		3.57 percent
snakes		4	2.04 percent
mell	5		2.55 percent
Other	14	7	10.71 percent

Table AF#7 Do you think that the Corps should preserve wild/undeveloped areas around it lakes whenever possible?								
	Carl	yle	Woodr	ruff	All	Lakes		
Yes	75	84.27%	107	93.86%	182	89.66%		
No	13	14.61%	7	6.14%	20	9.85%		
Undecided	1	1.12%			1	0.49%		

	Carlyle (115)	Woodruff (82)		
Swimming	6	1	3.55 percent	
Camping	11	23	17.26 percent	
Fishing	5	6	5.58 percent	
Picnic/cookout/barbeque	4	1	2.54 percent	
Boating (general)	39	20	29.95 percent	
Boating (Personal Water Craft)	17	2	9.64 percent	
Hunting	8	3	5.58 percent	
Water ski	9	8	8.63 percent	
Volleyball	8	1	4.57 percent	
Play on playground		1	0.51 percent	
Scuba diving	1	1	1.02 percent	
Hike	7	2	4.57 percent	
Bike		1	0.51 percent	
Basketball	2	1	1.52 percent	
Nothing	10	14	12.18 percent	
Baseball/Softball	1	2	1.52 percent	
Bungee jumping		1	0.51 percent	
Canoe/rafting	4	4	4.06 percent	
Parasailing	2		1.02 percent	
Golf	1	2	1.52 percent	
Other	4	3	3.55 percent	

Table AF#9 Is English your primary language?						
	Carly	Carlyle (115) Woodruff (90)		druff (90)	All Lakes	(205)
Yes	115	100.00%	90	100.00%	205	100.00%

Table AF#9a If not, what is your primar	y language?
no data	

Table AF#9b If not, do language problems make it difficult for you or members of your family to understand the signs posted at the lakes?

no data

Table AF#9c If not, do language problems make it difficult for you or members of your family to understand the verbal instructions of Corps rangers at the lakes?

no data

Table AF#10 H	ow often do you visit Co	rps Lakes?	
	Carlyle (109)	Woodruff (87)	All Projects (196)
Average	29.15	17.59	24.02
low	1	1	1
high	200+	130	200+

Table AF#11 How long does it take to travel to your favorite Corps lake?				
	Carlyle (114)	Woodruff (89)	All Projects (203)	
Average	1.03 hours	0.94 hours	0.99 hours	
low	0.25 hours	0.25 hours	0.50 hours	
high	6.00 hours	10.00 hours	3.00 hours	

Table AF#12 Does the lack of public transportation prevent you from visiting Corps lakes as often as you would like?						
	Car	lyle	Woo	odruff	All Lak	es
Yes	1	1.11%	22	19.13%	23	11.22%
No	89	98.89%	93	80.87%	182	88.78%

	Carlyle (114)	Woodruff (90)
Swimming	53	41	46.08 percent
Fishing	68	28	47.06 percent
Boating (general)	26	20	22.55 percent
Boating (Personal Water Craft)	3		1.47 percent
Water ski		2	0.98 percent
Nothing	9	15	11.76 percent
Canoe/rafting	1		0.49 percent
Other	3		1.47 percent

	Carlyle (108)	Woodruff	(90)
Camping	8	1	4.55 percent
Horseshoe playing	2	1	1.52 percent
Picnic/cookout/barbeque	24	10	17.17 percent
Hunting	1		0.51 percent
Volleyball	16	33	24.75 percent
Football	1	2	1.52 percent
Basketball	7	49	28.28 percent
Nothing	46	10	28.28 percent
Baseball/Softball	11	23	17.17 percent
Frisbee	3		1.52 percent
Kickball	1	1	1.01 percent
Other	12	10	11.11 percent

	Carlyle (101)	Woodruff ((90)
Children's activity		3	1.57 percent
Horseshoe playing	1	6	3.66 percent
Boat shows		1	0.52 percent
Volleyball	17	3	10.47 percent
Boat rental	8	2	5.24 percent
Basketball	11	3	7.33 percent
Nothing	47	29	39.79 percent
Fishing tournament	4	1	2.62 percent
Baseball/softball	8	18	13.61 percent
Swim lessons		2	1.05 percent
Concert/music		5	2.62 percent
Hikina	1	3	2.09 percent
Horseback riding	2		1.05 percent
Playground	2	5	3.66 percent
Tennis	2	7	4.71 percent
Other	20	13	17.28 percent

	Carlyle (110)	Woodruff (90)		
Additional/improved picnic/camp sites	8	13	21	10.50 percent
Horseshoe pits	1	2	3	1.50 percent
Snack bar/store	11	10	21	10.50 percent
Restaurant	2		2	1.00 percent
Volleyball court	9		9	4.50 percent
Boat rental		3	3	1.50 percent
Basketball court	10		10	5.00 percent
Nothing		19	19	9.50 percent
Additional/improved swim areas	1	1	2	1.00 percent
Additional/improved water fountains	1	10	11	5.50 percent
Additional/improved restrooms	20	13	33	16.50 percent
Additional/improved showers	6	2	8	4.00 percent
Baseball/Softball	5	12	17	8.50 percent
Playgrounds	1	1	2	1.00 percent
Tennis courts		5	5	2.50 percent
Cabins	4	2	6	3.00 percent
Fishing docks		1	1	0.50 percent
Other	16	19	35	17.50 percent

	Carlyle (115)	Woodruff (90)	
YES, no explanation given	21	47	33.17%
YES, adequate patrol by rangers/law enforcement	46	31	37.56%
YES, good atmosphere	14		6.83%
YES, no problems ever experienced	16		7.80%
YES, other people are present	6		2.93%
YES, I do not feel crowded	1		0.49%
YES, no rowdy/ bad visitors	7	2	4.39%
YES, areas are well lighted	4		1.95%
YES, areas have open feeling	3		1.46%
YES, I only come during daylight	3		1.46%
YES, people here are friendly	9		4.39%
YES, other	3		1.46%
YES, gate to park is monitored/regulated		9	4.39%
NO, I fear the snakes	1		0.49%
Not always, some areas not well lighted	1		0.49%
NO, I fear the water	2		0.98%

	Carlyle (114)	Woodruff (90)	
YES, no explanation given	29	36	31.86 percent
YES, never harassed by rangers/ management	6		2.94 percent
YES, rangers/management are friendly to me	59	32	44.61 percent
YES, no problems ever experienced	3		1.47 percent
YES, rangers/management take care of me	6	9	7.35 percent
YES, rangers/management are highly visible	6	12	8.82 percent
YES, other	2		0.98 percent
Sometimes, they stare at us	1		0.49 percent
Mostly, they need to cut the grass	1		0.49 percent
Sometimes		1	0.49 percent
NO, non-Corps Conservation Police Officers harass minorities	1		0.49 percent

Table AF#19 Do you ever visit interpretive displays about natural or cultural resources or enjoy the nature trails at Corps lakes?								
	C	arlyle	Wo	odruff	All Lake	es		
Yes	37	32.17%	40	44.44%	77	37.56%		
No	78	67.83%	50	55.56%	128	62.44%		
Undecided								

Table AF#20 Have you felt discriminated against because of your racial/ethnic background at a Corps lake? If so, please explain.						
	Carlyle (115)	Woodruff (90)				
NO	109	89	96.59%			
YES, no explanation given		1	0.49%			
Sometimes, perceived racism from non-Corps Police	2		0.98%			
YES, rangers stare at us	1		0.49%			
YES, perceived racism from another visitor	3		1.46%			

	Carlyle (111)	Woodruff (89)	
YES, no explanation given	36	85	60.50%
YES, many things to do here	5	1	3.00%
YES, good accessability	3		1.50%
YES, no problems ever experienced	4		2.00%
YES, the facilities are good	21		10.50%
YES, there is equal treatment for all races	32		16.00%
YES, this place is a good fishing opportunity	5		2.50%
YES, minorities use Corps parks	4		2.00%
YES, other	3		1.50%
NO, lifeguards at swim areas needed		1	0.50%
NO, need more minority activities like basketball	1		0.50%
NO, no explanation given		2	1.00%

	Carlyle (104)	Woodruff (90)	
Add improved picnic/camp sites	11	15	13.40%
Add snack bar/store	9	2	5.67%
Provide lifeguards at swim area	1	12	6.70%
Add volleyball court	2		1.03%
Add boat rentals	2	4	3.09%
Current facilities are great, make no change	42		21.65%
Add improved swim areas	2	3	2.58%
Add improved water fountains	1	5	3.09%
Add improved restrooms	20		10.31%
Add improved showers	2	2	2.06%
Remove or repair camping reservation system	1		0.52%
Add playgrounds	5	6	5.67%
Eliminate or reduce fees		24	12.37%
Add parking	2	1	1.55%
Add tennis courts		3	1.55%
Improve fishing	3		1.55%
Be more friendly to minorities	1		0.52%
Add Hiking trails	3	1	2.06%
Add hotel	2		1.03%
Add restaurant	2		1.03%
Provide music/concerts		3	1.55%
Add boat docks	2	1	1.55%
Other	22	20	21.65%

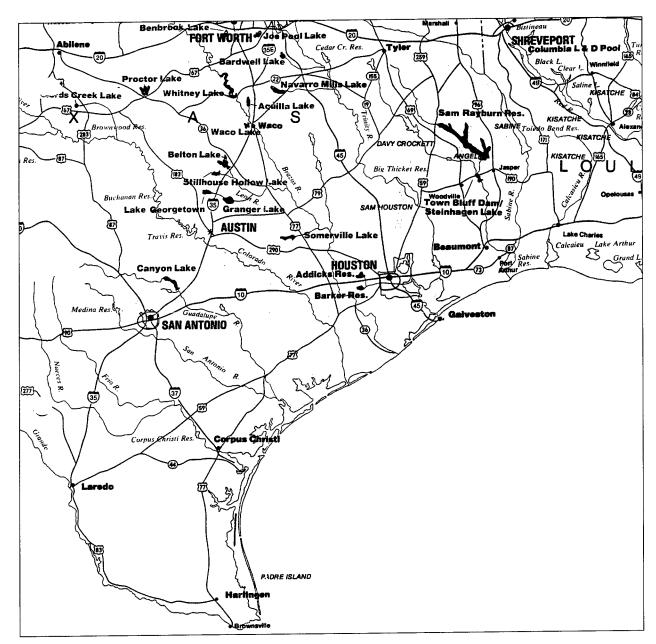


Figure 11. Regional map showing location of Canyon Lake, TX



Figure 12. Administration of Survey Instrument at Canyon Lake, TX, by Ranger Lindsey Johnson

Hispanic Americans

	Canyon (100)	Pine Flat (53)	Hensley (7)	
Swimming	61	12	3	47.50%
Camping	54	12	1	41.88%
Fishing	40	27	4	44.38%
picnic/cookout/barbeque	43	19	4	41.25%
Boating (general)	19	4	1	15.00%
Boating (Personal Water Craft)	3	1		2.50%
Hunting	4	3		4.38%
Water ski	9	1		6.25%
Volleyball	8			5.00%
Sightseeing/Tours		4		2.50%
Drinking Alcoholic Drinks	2	1		1.88%
Hike	2	1		1.88%
Bike	4			2.50%
basketball	3			1.88%
Football	1			0.62%
Baseball/Softball	2			1.25%
Relaxing	4	2		3.75%
Golf	2			1.25%
Tennis	1			0.62%
Other	20	2		13.75%

Table HS#2 What is the average size group you bring to the Corps lake when you visit?									
	Canyon (100)	Pine Flat (53)	Hensley (7)	All Projects (160)					
Average	12.18	5.21	6.43	9.62					
low	2	1	2	1					
high	52	17	11	52					

	How many:	How many:malesfemalesunder 17									
	Canyon (100)	Pine Flat (51)	Hensley (7)	All Projects (158)							
Average	11.25	4.41	5.86	8.8							
low	2	1	2	1							
high	50	20	9	50							

Table HS#4 I						pgrounds wi	th develo	oped
	Ca	anyon (97)	Pine	Flat (46)	Her	sley(7)	All Lak	res (150)
Primitive	16	16.49%	19	41.30%	6	85.71%	41	27.33%
Developed	81	83.51%	27	58.70%	1	14.29%	109	72.67%

	Canyon (100)	Pine Flat (53)	Hensley (5)	
swimming area	12	4	3	12.03%
picnic/camp sites	12	5		10.76%
fishing	1	6		4.43%
peacefulness	13	7	1	13.29%
scenic beauty	29	8	1	24.05%
trees	3	1	1	3.16%
shade	11	8		12.03%
convenient location	7	10		10.76%
water	27	1		17.72%
the dam		4		2.53%
grass		2		1.27%
river/lake	3	3		3.80%
size of lake	4	1		3.16%
cleanliness of lake	10			6.33%
cleanliness of park	22			13.92%
well kept condition of park	10			6.33%
low cost	3			1.90%
familiarity	2			1.27%
other friendly people	3			1.90%
breeze	2			1.27%
Other	17		1	11.39%

	Canyon (100)	Pine Flat (49)	Hensley (7)	
swimming area size/condition	4	1		3.21%
picnic/camp sites	3	2	3	5.13%
nothing	13	9		14.10%
crowding	5	1		3.85%
insufficient parking	2	2		2.56%
lack of trees		1	1	1.28%
lack of shade	6	3	1	6.41%
litter	6	17		14.74%
water	1	4		3.21%
evidence of vandalism		3		1.92%
lack of grass		2		1.28%
roads		1	1	1.28%
restrooms	63	1		41.03%
lack of showers	8			5.13%
pest insects	4			2.56%
waiting in lines	4			2.56%
intoxicated/rowdy visitors	3			1.92%
lack of reservations	2			1.28%
too many rocks	2			1.28%
Other	7	13	1	13.46%

Table HS#7			e Corps	s should pres	erve wi	ild/undevelop	ed areas	around its
	Canyon		Pine Flat		Hensley		All La	akes
Yes	87	87.00%	48	90.57%	7	100.00%	142	88.75%
No	10	10.00%	5	9.43%			15	9.38%
Undecided	3	3.00%					3	1.88%

	Canyon (100)	Pine Flat (46)	Hensley (4)	
Swimming	1	1		1.33%
Camping	4	12	1	11.33%
Fishing	4	3		4.67%
Picnic/cookout/barbeque		2		1.33%
Boating (general)	19	11	1	20.67%
Boating (Personal Water Craft)	28			18.67%
Hunting	2	2	2	4.00%
Water ski	16	3		12.67%
Volleyball	5	1		4.00%
Play on playground	1	1		1.33%
Scuba diving	5			3.33%
Hike	9			6.00%
Bike	1	2		2.00%
Basketball	1			0.67%
Nothing		2		1.33%
Baseball/Softball	1			0.67%
Nothing	11			7.33%
Horseback riding	3	2		3.33%
Sky diving	3	2		3.33%
Bungee jumping	2			1.33%
Canoe/rafting	2	7		6.00%
Parasailing	9	1		6.67%
Golf	1			0.67%
Tennis	1			0.67%
Other	2	4		4.00%

Table H	IS#9 Is Er	nglish your p	rimary la	anguage?					
	Canyo	nyon (100) Pine Flat (53		Canyon (100) Pine Flat (53) Hensle		Hensley (7)		All Lakes (160)	
Yes	86	86.00%	29	54.72%	2	28.57%	117	73.13%	
No	14	14.00%	24	45.28%	5	71.43%	43	26.88%	

Table HS#9a If not, what is your primary language?											
	Ca	anyon Pine Flat		Hensley		All Lakes					
Spanish	14	100.00%	24	100.00%	5	100.00%	43	100.00%			

Table I	IS#9b If i to unders	not, do langua tand the signs	ge prob s posted	lems make it at the lakes?	difficul	for you or m	embers	of your
	Cá	anyon	Pine	e Flat	He	nsley	All L	.akes
Yes	4	40.00%			1	20.00%	5	12.82%
No	6	60.00%	24	100.00%	4	80.00%	34	87.18%

Table I	IS#9c If r erstand th	not, do langua ne verbal instr	ge prot	olems make it of Corps ran	difficult gers at t	for you or mo	embers	of your family
	Ce	Canyon		Pine Flat		Hensley		akes
Yes	4	44.44%	1	20.00%	2	8.33%	7	18.42%
No	5	55.56%	4	80.00%	22	91.67%	31	81.58%

Table HS#10 How often do you visit Corps Lakes?								
	Canyon (97)	Pine Flat (48)	Hensley (6)	All Projects (151)				
Average	12.4	31.9	45.33	19.91				
low	1	1	12	1				
high	104	60	52	104				

Table HS#11 How long does it take to travel to your favorite Corps lake?								
	Canyon (99)	Pine Flat (53)	Hensley (7)	All Projects (159)				
Average	1.15 hours	0.68 hours	0.50 hours	0.97 hours				
low	0.25 hours	0.25 hours	0.25 hours	0.25 hours				
high	5.00 hours	3.00 hours	1.00 hours	5.00 hours				

Table I	HS#12 Dod	es the lack of ald like?	public t	ransportatio	n preven	t you from vis	iting Co	rps lakes as
	Canyon		Pine Flat		Hensley		All Lakes	
Yes	7	7.00%	2	3.77%			9	5.63%
No	93	93.00%	51	96.23%	7	100.00%	151	94.38%

	Canyon (100)	Pine Flat (52)	Hensley (7)	
Swimming	88	31	7	79.25%
Fishing	44	16	3	39.62%
Boating (general)	31	5	1	23.27%
Boating (Personal Water Craft)	7	1		5.03%
Water ski	13	4	1	11.32%
Volleyball	2			1.26%
Scuba diving	2			1.26%
Nothing	3	5		5.03%
Canoe/rafting		4		2.52%
Other	1	3		2.52%

	Canyon (95)	Pine Flat (45)	Hensley (5)	
Camping	34	5		26.90%
Horseshoe playing	6			4.14%
Picnic/cookout/barbeque	79	22	5	73.10%
Hunting	3	1		2.76%
Volleyball	10	6		11.03%
Bike	4			2.76%
Basketball	1	1		1.38%
Nothing		9		6.21%
Baseball/Softball	5	2		4.83%
Drink alcoholic beverages	2	1		2.07%
Soccer	3	2	1	4.14%
Other	32	5		25.52%

	Canyon (82)	Pine Flat (26)	Hensley (0)	
Children's activity	3	2		4.63%
Horseshoe playing	5	2		6.48%
Boat races	3			2.78%
Rollerblading	2			1.85%
Volleyball	22			20.37%
Boat rental	9	2		10.19%
Basketball	8			7.41%
Nothing	11	12		21.30%
Washer pitching	3			2.78%
Boat tours	2			1.85%
Showering	2			1.85%
Tennis	3			2.78%
Hiking	3			2.78%
Horseback riding	2			1.85%
Playground	9			8.33%
Soccer	3			2.78%
Other	19			17.59%

	Canyon (97)	Pine Flat (38)	Hensley (2)	
Additional/improved picnic/camp sites	26	9	1	26.28%
Horseshoe pits	2			1.46%
Snack bar/store	8	2	1	8.03%
Restaurant	1	1		1.46%
Volleyball court	8	1		6.57%
Boat rental	3			2.19%
Basketball court	4			2.92%
Nothing	2	6		5.84%
Additional/improved swim areas	11	3		10.22%
Additional/improved water fountains	4	2		4.38%
Additional/improved restrooms	44	5		35.77%
Additional/improved showers	33			24.09%
Baseball/Softball	3			2.19%
Playgrounds	14	4		13.14%
Fishing docks	3	2		3.65%
Other	22	11		24.09%

	Canyon (100)	Pine Flat (53)	Hensley (7)	
YES, no explanation given	20	25	7	32.50%
YES, adequate patrol by rangers/law enforcement	49	16		40.62%
YES, gate to park is monitored/regulated	6			3.75%
YES, no problems ever experienced	15	2		10.62%
YES, swimming area is good	4			2.50%
YES, other people are present	7	6		8.12%
YES, I do not feel crowded		2		1.25%
YES, people here are friendly	4	2		3.75%
YES, other	5	6		6.88%
NO , lifeguards not present at swim area	1			0.62%

	Canyon (99)	Pine Flat (51)	Hensley (7)	
YES, no explanation given	26	26	7	37.58%
YES, never harassed by rangers/management	5	2		4.46%
YES, rangers/management are friendly to me	52	16		43.31%
YES, no problems ever experienced		4		2.55%
YES, rangers/management take care of me	6			3.82%
YES, rangers/management are highly visible	3	2		3.18%
Sometimes, they stare at us	1			0.64%
Not especially	1	1		1.27%
YES, other	4			2.55%
Sometimes	1			0.64%

		ı ever visit in İs at Corps la		ve displays a	about n	atural or cult	ural reso	ources or
	Ca	nyon	Pin	e Flat	He	nsley	All Lake	es
Yes	23	23.00%	16	30.19%	5	71.43%	44	27.50%
No	74	74.00%	37	69.81%	2	28.57%	113	70.63%
Undecided	3	3.00%					3	1.88%

Table HS#20 Have you felt discriminated against because of your racial/ethnic background at a Corps lake? If so, please explain.							
	Canyon (98)	Pine Flat (53)	Hensley (7)				
NO	96	53	7	98.73%			
YES, perceived racism from Sheriff's Deputy	1			0.63%			
YES, perceived racism from another visitor	1			0.63%			

	Canyon (94)	Pine Flat (50)	Hensley (7)	
YES, no explanation given	35	28	7	46.36%
YES, the fees are inexpensive	3	1		2.65%
YES, conducting survey shows Corps is concerned		3		1.99%
YES, no problems ever experienced	3	1		2.65%
YES, the facilities are good	5	7		7.95%
YES, there is equal treatment for all races	39	4		28.48%
YES, minorities are allowed in Corps parks	1	3		2.65%
YES, other	5	3		5.30%
NO, more playgrounds needed	1			0.66%
NO, everything well maintained, but facilities are dated	1			0.66%
NO, no explanation given	1			0.66%

	Canyon (93)	Pine Flat (52)	Hensley (7)	
Add improved picnic/camp sites	27	10	4	26.97%
Add snack bar/store	3			1.97%
Provide lifeguards at swim area	1	4	1	3.95%
Add volleyball court	3	1		2.63%
Add boat rentals	2	1		1.97%
Current facilities are great, make no change	3	1	1	3.29%
Add improved swim areas	14			9.21%
Add improved water fountains	6	1		4.61%
Add improved restrooms	53	6	1	39.47%
Add improved showers	28			18.42%
Add camping reservations	4			2.63%
Add playgrounds	8	2		6.58%
Plant more trees	3		1	2.63%
Plant more grass		2		1.32%
Clean up litter		11	1	7.89%
Add parking	1	4		3.29%
Repair/eliminate vandalism		4		2.63%
Improve fishing access		5		3.29%
Add fishing docks	2	2		2.63%
Other		16	1	11.18%

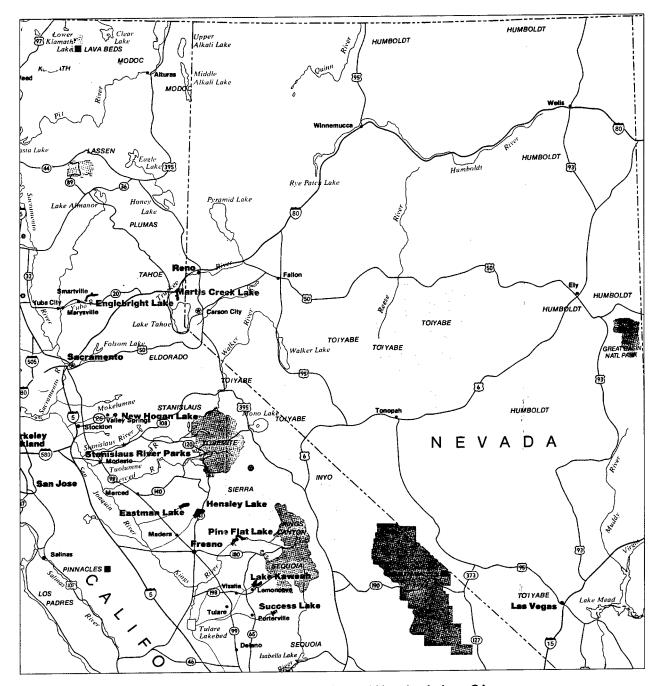


Figure 13. Regional map showing locations of Pine Flat and Hensley Lakes, CA

Asian Americans

	Pine Flat (55)	Hensley (40)	
Swimming	6	9	15.79%
Camping	6	2	8.42%
Fishing	54	37	95.79%
Picnic/cookout/barbeque		1	1.05%
Boating (general)	3	1	4.21%
Hunting	17	10	28.42%
Nater ski		2	2.11%
Hike	2		2.11%
Bike	2	1	3.16%
Bowling	2		2.11%
Other	3	1	4.21%

Table AS#2 What is the average size group you bring to the Corps lake when you visit?					
	Pine Flat (55)	Hensley (35)	All Projects (90)		
Average	4.67	5.43	4.97		
low	1	2	1		
high	13	11	13		

	How many:ma	lesfemales	_under 17
	Pine Flat (55)	Hensley (40)	All Projects (95)
Average	4.18	4.75	4.42
low	1	1	1
high	20	14	20

Table AS#4 Do you prefer primitive camping areas or campgrounds with developed facilities and services (electrical hook-ups, tollets, etc)?								
	Pine Flat (54)		Hensley(38)		All Lakes (92)			
Primitive	50	92.59%	37	97.37%	87	94.57%		
Developed	4	7.41%	1	2.63%	5	5.43%		

	Pine Flat (54)	Hensley (37)	
swimming area		1	1.10%
isolation	4		4.40%
fishing	5	10	16.48%
peacefulness	2	4	6.59%
scenic beauty	38	21	64.84%
shade	2		2.20%
convenient location	2		2.20%
low crowding	5		5.49%
the dam		2	2.20%
river/lake	12		13.19%
cleanliness of lake	1		1.10%
low cost		1	1.10%
fresh air	2		2.20%
Other	7	1	8.79%

	Pine Flat (47)	Hensley (33)	
swimming area size/condition	1		1.25%
oicnic/camp sites	1	1	2.50%
nothing	2	3	6.25%
crowding	7	1	10.00%
nsufficient parking	1	2	3.75%
ack of trees	3	3	7.50%
ack of shade		2	2.50%
itter	26	7	41.25%
vater	1	1	2.50%
vidence of vandalism	1		1.25%
rild animals	1	1	2.50%
estrooms	2	1	3.75%
poor fishing	3	2	6.25%
oo hot	1	10	13.75%
Other	7	1	10.00%

	Pine	Flat	Hens	ley All Lake		kes
Yes	55	100.00%	40	100.00%	95	100.00%
No						
Undecided						

	Pine Flat (38)	Hensley (26)	
Swimming	3	1	6.25%
Camping	9	4	20.31%
Fishing	2	1	4.69%
Picnic/cookout/barbeque	1		1.56%
Boating (general)	7	3	15.62%
Boating (Personal Water Craft)	2	2	6.25%
lunting	8	8	25.00%
Vater ski	4	6	15.62%
cuba diving	2	3	7.81%
like	1		1.56%
lothing	4		6.25%
lorseback riding	1		1.56%
ky diving	1		1.56%
anoe/rafting	3	2	7.81%

	Dina Ele	+ /EE)	Hensley	(40)	(40) All Lakes	
	Pine Flat (55)		Hensiey	Tierisiey (40)		` 1
Yes	2	3.64%			2	2.11%
No	53	96.36%	40	100.00%	93	97.89%

Laos	Pine Flat(53)		Hensley(40)		All Lakes(93)	
	9	16.98%	12	30.00%	21	22.58%
Mien	1	1.89%			1	1.08%
Hmong	41	77.36%	25	62.50%	66	70.97%
Filipino	1	1.89%			1	1.08%
Cambodian			2	5.00%	2	2.15%
Vietnamese	1	1.89%	1	2.50%	2	2.15%

Table As	S#9b If not, d	o language prol the signs poste	olems maked at the lake	it difficult for yes?	ou or memb	pers of your
	Pine Flat		Hens	Hensley		kes
Yes	12	22.64%	4	10.00%	16	17.20%
No	41	77.36%	36	90.00%	77	82.80%

Table AS#9c If not, do language problems make it difficult for you or members of your family to understand the verbal instructions of Corps rangers at the lakes?								
	Pine Flat		Hensley		All Lakes			
Yes	13	24.53%	5	12.50%	18	19.35%		
No	40	75.47%	35	87.50%	75	80.65%		

Table AS#10 How often do you visit Corps Lakes?				
	Pine Flat (49)	Hensley (36)	All Projects (85)	
Average	31.59	42.11	36.05	
low	1	1	1	
high	130	130	130	

Table AS#11 How long does it take to travel to your favorite Corps lake?				
	Pine Flat (55)	Hensley (40)	All Projects (95)	
Average	0.85 hours	0.99 hours	0.91 hours	
low	0.50 hours	0.50 hours	0.50 hours	
hiah	2.00 hours	3.00 hours	3.00 hours	

Table AS#12 Does the lack of public transportation prevent you from visiting Corps lakes as often as you would like?						
	Pine Fla	t	Hens	ley	All La	kes
Yes						
No	55	100.00%	39	100.00%	94	100.00%

	Pine Flat (45)	Hensley (33)	
Swimming	26	18	56.41%
Fishing	20	10	38.46%
Boating (general)	4	3	8.97%
Boating (Personal Water Craft)		1	1.28%
Water ski	3	2	6.41%
Canoe/rafting	1		1.28%

	Pine Flat (44)	Hensley (23)	
Picnic/cookout/barbeque	29	13	62.69%
Volleyball	1	1	2.99%
Nothing	14	11	37.31%
Soccer		1	1.49%
Other	1		1.49%

Table AS#15 What activities would you like to have at Corps lakes that you do not have now?				
	Pine Flat (9)	Hensley (9)		
Fishing tournament	3	5	44.44%	
Boat races	1		5.56%	
Horseback riding		1	5.56%	
Playground	2		11.11%	
Other	2	2	22.22%	
Note: Many responder	nts gave multiple answ	vers		

	Pine Flat (26)	Hensley (24)	
Additional/improved picnic/camp sites	9	4	26.00%
Additional trash cans	2	1	6.00%
Snack bar/store	1	2	6.00%
Additional shade trees	5	3	16.00%
Additional/improved roads	3		6.00%
Additional/improved parking		2	4.00%
Nothing	1		2.00%
Additional/improved swim areas		1	2.00%
Additional/improved water fountains	2	1	6.00%
Additional/improved restrooms	9	1	20.00%
Additional/improved showers	1		2.00%
Other	1		2.00%

	Pine Flat (55)	Hensley (40)	
YES, no explanation given	44	32	80.00%
YES, most visitors speak same language as me	1		1.05%
NO, river current too fast	1		1.05%
NO, night time here scares me	2		2.11%
NO, I fear the car thieves	5	5	10.53%
NO, few other people are present	1		1.05%
NO, I fear the snakes	4	3	7.37%
NO, I fear the gangs	1		1.05%
NO, no explanation given		1	1.05%
Sometimes, when other visitors are around	1		1.05%

Table AS#18 Do you believe that the Corps managers and rangers make you feel welcome at Corps lakes? Why?					
	Pine Flat (49)	Hensley (39)			
YES, no explanation given	46	39	97.70%		
NO, no explanation given	1		1.15%		
Sometimes	2		2.30%		

Table AS#19 Do you ever visit interpretive displays about natural or cultural resources or enjoy the nature trails at Corps lakes?							
	Pine	Flat	Hensley		Hensley All Lakes		kes
Yes	30	54.55%	21	52.50%	51	53.68%	
No	25	45.45%	19	47.50%	44	46.32%	

Table AS#20 Have you felt discriminated against because of your racial/ethnic background at a Corps lake? If so, please explain.				
	Pine Flat (54)	Hensley (40)		
NO	53	40	98.94%	
YES, perceived racism from another visitor	2		2.13%	

Table AS#21 Do you think that the Corps is doing a good job of providing quality recreation for minorities? Why?						
	Pine Flat (52)	Hensley (40)				
YES, no explanation given	52	38	97.83%			
NO, more picnic areas needed		1	1.09%			
NO, more restrooms needed		1	1.09%			

	Pine Flat (45)	Hensley (38)	
Add improved picnic/camp sites	11	14	30.12%
Add more ranger patrols	2	1	3.61%
Reduce snakes		1	1.20%
Current facilities are great, make no change	1	1	2.41%
Add improved water fountains		1	1.20%
Add improved restrooms	11	2	15.66%
Add improved roads	2	2	4.82%
Offer fishing tournaments	1	4	6.02%
Hire Hmong rangers	2		2.41%
Plant more trees	7	5	14.46%
Plant more grass	1		1.20%
Clean up litter	11	8	22.89%
Add parking	6	4	12.05%
Restrict boaters numbers/location	1	3	4.82%
Improve fishing access		2	2.41%
Improve fishing, stock fish in lake	2	8	12.05%
Other	4	1	6.02%

Discussion of Test Results

The survey results shown in the sixty-six tables corroborate the major results of the focus groups reported in the four Tech Notes and the literature survey by Gramann (1996). A table-by-table comparison (e.g., compare table AF#1 to HS#1 to AS#1) shows three quite distinctive recreational styles and differing levels of participation in the water-based recreational opportunities offered at Corps projects. The major recreational preferences for the three groups seem to correspond in general to those previously discussed in the section on known ethnic trends in recreation. Some examples of these major themes include the following:

- (1) **Hispanic Americans**—the large group size, the strong cultural traditions, the emphasis on the extended family recreating together, the preference for developed campsites and on-site outdoor cooking, and a moderate interest in water based recreation are strongly confirmed in the survey results.
- (2) African Americans—the keen interest in team sports by "Generation X" (non-baby boomers); the strong sense of local community and the desire to express this in community events; the relative lack of participation in camping and water-based recreation (except for fishing); and the large group sizes of black family reunions where far-flung family members return to the ancestral South, are all strongly expressed in the survey results.
- (3) Asian Americans—the overall heterogeneity of this diverse group and the differing levels of acculturation of specific ethnic groups; the strong link between subsistence and recreation (fishing and hunting) among the least acculturated Asian groups such as the Hmong; and a relative lack of interest in team sports, outdoor camping, and water based activities such as boating, sailing, and the use of personal water craft are strongly expressed in the survey results.

The 1999 survey at the five Corps lakes provides a wealth of detail which complements the information from the focus group interviews. As the survey results were analyzed and compared with the results of the focus group interviews at these same five projects, an even more complete picture emerged.

At the project level, knowledge of these details (e.g., the responses to questions 15 and 16 for each ethnic group) is essential for providing the best customer service at the local level. When used together, the survey results and the focus group interviews provide the clearest picture of how the respective minority groups currently use the project facilities, how they perceive the Corps as a land managing agency, how they relate to the Corps staff and gate attendants, and what they desire in future services and facilities. This issue of the complementarity of focus groups and surveys is discussed in the last chapter in more detail. For now, the key point to be

made is that focus groups and surveys are complementary procedures and when used together constitute the recommended methodology for ethnic recreation data acquisition and evaluation.

The draft survey instrument contained in Appendix 1 was very successful in eliciting a wealth of information. Some of this data will have to be analyzed at some future date when more emphasis can be placed on substance and less on methodology. For example, data on age and sex ratios of the minority groups (question 3) could not be fully addressed in this report because of the inconsistent responses given to a question borrowed from another OMB-approved survey. What was perceived as a relatively simple question had the potential for great misunderstanding which unfortunately was fully realized. This particular problem only became apparent after the survey results were compiled. Following a review of all the survey results, the not too unexpected conclusion was reached that the instrument used in the 1999 survey was far from perfect.

Co-author Dave Quebedeaux of Canyon Lake, who has both an academic background (Texas A&M University) in outdoor recreation and many years of experience dealing with ethnic minority visitors, was asked for his candid evaluation of the survey instrument and what improvements he would like to see made if he had to use it again. After personally administering the survey to over 50 Hispanic visitors and spending considerable time compiling the results, this is what he concluded:

"If we were to do this survey again, I would suggest several changes. These changes to the survey instrument would fall into three categories:

- 1. Changes for the person that administers the survey. These changes would speed the time needed for the survey to be properly completed.
- 2. Changes which would gather more useful information from the ethnic minority visitor.
- 3. Changes which would prompt the visitor to answer with a legitimate answer."

Recommendations for Background Information

Mr. Quebedeaux recommended the following changes to the top portion of the survey instrument:

Date	Reservoir	
Time		
Day Use Area Name	Camping Area	
Attended Gate	Attended Gate	
Honor Vault	Honor Vault	
No Charge	No Charge	
Boat Ramp	Cabins	
Swim Area	Swim Area	
Restrooms	Restrooms	
Showers	Showers	
	Electric in Campsite	
	Water in Campsite	
	Sewer in Campsite	

These changes would speed the interview while giving a better picture of the area being used by the visitor at the time of the interview. This data could later be used to sort the questionnaires.

The interviewer was asked to record the type of group membership. Some interviewers were confused by this question. The information would be better captured in a multiple choice format:

Type of Group Membership
Family
Friends
Co-workers
Religious
School
Other

Also, not all users of a Corps lake or facility actually knew of the Corps' role as the recreation manager/provider. Many did not know anything about the U.S. Army Corps of Engineers or that the Corps was the manager of the very park where the visitor had engaged in recreation for years. Many people only knew of the one lake where the survey was administered and could not identify any other Corps lakes.

Recommendations on Questions Used

Mr. Quebedeaux offered the following comments on the questions used in the survey.

Question 1. Good Question. I would not change a thing. It addresses the most basic recreation values of the visitor. It does, however seem to overlap significantly with questions 13 and 14. While question 1 asks about a favorite activity, questions 13 and 14 ask about all activities in which the visitor participates. Most visitors' responses for question 1 were similar to the questions 13 and 14 responses. Many of the respondents failed to distinguish between favorite activities and their comprehensive list of activities.

Question 2. Good Question. I would only add an instruction that stated, "Give only one average number, not a range of numbers." This change would add increased accuracy to the visitor responses. This question is important for the recreation manager who is looking at the size of facilities. In instances of large groups, picnic table size and campsite size are definite issues. When the surveys indicate a strong showing of large groups, the recreation manager can improve facilities to better accommodate the groups already using the area while making the area more attractive to other large groups currently choosing to visit elsewhere. Improved customer service equals increased visitation, increased revenue, improved customer satisfaction, and a possible decrease in large group management problems.

Question 3. Good Question. However, the responses filled out by the interviewer were in various different forms. This question provides information that is valuable to the recreation manager who wishes to better serve or target a specific gender group, family group, or non-gender-specific youth group. Basically, the total in the group today was the only consistent information gathered by this question in its current form.

Answer version A.

Some counted all males regardless of age and entered that number in the males blank. Then, all females regardless of age were counted and that number was entered in the females blank. Then all males and females under 17 years of age were counted and entered in the under-17 blank. The sum of the males, females, and under-17 blanks exceeded the number of people in the total group that day. The result of this approach is basically useless information.

Answer version B.

Some counted all adult males and entered that number in the males blank. Then, all adult females were counted and that number was entered in the females blank. Then all males and females under 17 years of age were counted and entered in the under-17 blank. The sum of the males, female, and under-17 blanks correctly added up to the number of people in the total group that day. The result of this approach was useful information.

Answer version C.

Poor math skills on the part of the interviewer, visitor, or both most likely led to a set of numbers for which there is no mathematical explanation.

Suggest the following revision of the question:

In your group today, how ma	any:
adult males	
adult females	
youths (either sex, under 17)	
total (all adults and youths)	
or	
or In your group today, how ma	any:
	any:
In your group today, how ma	any:
In your group today, how madult males	any:
In your group today, how me adult males adult females	any:
In your group today, how madult males adult females youth female(under 17)	any:

Question 4. Good Question. This question shows demand for primitive or developed camping areas. In order to speed the interview, the question should be presented with check boxes as follows:

Do you prefer primitive camping areas or campgrounds with							
developed f	acilities and	services (electrica	al hookups	, toilets,			
etc.)?							
Primitive	()	Developed	()				

Question 5. Good Question. This question probes for successful attractant features of the area, lake, or park. The site/lake designation in this question confused the visitor and therefore offered a variety of responses. Some visitors only described the very campsite or picnic site where they were at the time of questioning. Others offered answers that referred only to the lake water. Some visitors did offer answers which showed an appreciation of attractive features of the general area and specific park features. Suggest changing site/lake to one of the following:

camp/picnic site
park
lake area in general
(Choice would depend on the information desired.)

Question 6. Good Question. This question probes for unsuccessful attractant features of the area, lake, or park. The site/lake designation in this question confused the visitor and therefore offered a variety of responses. Some visitors only described the very campsite or picnic site where they were at the time of questioning. Others offered answers that referred only to the lake water. Some visitors did offer answers which showed an appreciation of attractive features of the general area and specific park features. Suggest changing site/lake to one of the following:

camp/picnic site
park
lake area in general
(Choice would depend on the information desired.)

Question 7. Good question. "No" answers sometimes were accompanied by comments complaining of crowding. This response suggests that more development would decrease crowding problems. In order to speed the interview, the question should be presented with check boxes as follows:

YES () NO ()

Question 8. Good question. This question shows areas of recreation use growth. Some answers suggest that there is a significant number of visitors who have not engaged in all of the recreation opportunities that currently exist at a Corps location.

Question 9. Good question. Answers to this question shows levels of acculturation within the ethnic minority recreation users at a Corps Project. Questions 9a and 9c have answers which may show a need for Corps Ranger/Manager foreign language skills. Question 9b answers may be an indicator as to the success of the Corps Sign Program with respect to ethnic minority recreation area users. In the interest of speed, I would include check boxes for Yes and No for questions 9, 9b, and 9c.

Question 10. Good question. Shows level of repeat visitation. The standard should be visits per year. This answer is best encouraged by changing the question to read:

How many times per year do you visit a Corps Lake? (an average, not a range)

It should be noted that the visitor answering this question must be aware of what constitutes a Corps lake and which lakes are Corps administered projects.

A useful follow up question would be: "What would the Corps have to do to get you to visit more?" Question 22 is essentially the same question.

Question 11. Good question. This question could show the effective range if an individual lake's marketing efforts. Willingness to travel to a Corps project is also indicated in this question's answers. It should be noted that the visitor answering this question must be aware of what constitutes a Corps lake and which lakes are Corps administered projects. This question could also be stated as follows:

What is your favorite Corps lake? How long does it take you to travel to your favorite Corps lake? How long did it take you to travel here?

Question 12. This OMB-inserted question should be deleted. Almost all answers were "NO." Visitors sometimes seemed puzzled as to why this question was asked. It may be the fact that most people who would answer "YES" do not come to a Corps lake and therefore would never be surveyed.

Question 13. This question should be deleted. See question #1.

Question 14. This question should be deleted. See question #1.

Question 15. Combine questions 15 and 16 to read:

What activities and facilities would you like to have at Corps lakes that you do not have now?

Visitors had problems distinguishing "activities" from "facilities."

Question 16. Combine questions 15 and 16 to read:

What activities and facilities would you like to have at Corps lakes that you do not have now?

Visitors had problems distinguishing "activities" from "facilities."

Question 17. Good question. Answers to this question show perceived safety shortcomings and successes.

Question 18. Good question. Answers to this question show perceived Corps hospitality shortcomings and successes.

Question 19. Good question. Many "NO" answers were received. If trails or interpretive displays exist at the Corps lake where the survey is being administered, the interviewer should take the time to educate the visitor if they are interested in becoming a "YES." In order to speed the interview, the question should be presented with check boxes as follows:

YES () NO ()

Question 20. Good Question. This question is one of the most personal and searching on this survey. The vast majority of answers were "NO." It should be noted that the locations where these questions were tested were largely ethnic minority recreation sites. Corps lakes with a more diverse ethnic visitor population may result in showing more discrimination. A visitor at Canyon, which has a heavy Hispanic-American visitation, seemed to sum up the Hispanic-American view on this question by answering, "No, I am not a minority here."

Question 21. Good question. The vast majority of answers were "YES." A large number of "NO" answers would show a perceived Corps discrimination problem.

Question 22. Moderately good question. This question basically readdresses the same areas covered in questions 15 and 16, but it ends the survey with a "We are the Corps and we care about ethnic minority recreation."

6 Guidelines and Recommendations for Project Managers

Focus Groups

The authors' experience with focus groups in the conduct of this research on ethnic minority recreation was extremely positive. The focus group format allowed researchers to ask follow-up questions and observe participants' non-verbal communication (e.g., body language), and allowed participants the opportunity to express themselves with ease verbally when they could not do so in a written format. For these reasons, Corps project managers are urged to make use of the focus group approach in determining the specific recreational needs and preferences of their minority customers. Recommended sources for information on the use of focus groups include Krueger (1988), Morgan (1988), Stewart and Shamdasani (1990), and Templeton (1994).

Up to a point, the less acculturated the ethnic group the more valuable and positive were the results of the focus group. There does come a point, however, where language becomes a real problem and the use of a third-party translator reduces the spontaneity of the verbal interchange between the facilitator and the participants. In some cases (e.g., Native Americans, Southeast Asians) focus groups may even substitute for the kind of formal survey instrument contained in Appendix A. The use of focus groups in advance of administering a formal survey instrument is strongly recommended.

Many project managers may have had little experience with this type of qualitative information gathering and consequently may wish to hire a professional consultant to facilitate, record, and analyze the results of the focus group(s). Krueger (1988) provides valuable information on what to look for when contracting with a professional focus group consultant. For project managers interested in conducting focus groups with ethnic

minority customers on their own, a synopsis of Krueger's helpful discussion on this topic is provided below.

Participants in a Focus Group

The first thing to recognize in organizing any focus group is that "the purpose drives the study." To decide who should be invited to the group interview, think about the overall purpose of the study. Usually the purpose is to make meaningful (useful) generalizations about people who have certain things in common, such as ethnic background. The purpose for the research should guide the subsequent decisions on whom to invite to the focus group. The statement of purpose may require incremental refinement and clarification to ensure the target audience is precisely defined. Krueger (1988:92) notes that:

...the researcher might have initially identified community residents, but later, after some thought, restricted the audience to unmarried residents between the ages of 18 and 40. In other situations, the key unit of analysis might be stated in broad terms, such as homemakers, teenagers, or residents of a geographical area....the purpose of the study dictates the degree of specification need in the target audience. If an organization is interested in reaching new members and wants to use focus groups to discover those features that would prompt attendance, then a decision is needed. What type of members is it seeking to attract? If several different audiences are sought, then it is advisable to conduct a series of focus groups with each audience category...

Selection: A focus group should be characterized by its overall homogeneity yet there should always be sufficient variation among participants to allow for contrasting opinions. Professional researchers commonly seek homogeneity of focus group participants in terms of occupation, social class, education level, age, education, or family characteristics. The guiding principle is the degree to which these factors will influence sharing within the group discussion. Too little homogeneity will inhibit sharing. Ethnicity could serve as just such a guiding principle for focus groups which might be organized by Corps project managers. A potential focus group consisting of a group of "minorities" (black, Hispanic, Asian, etc.) would lack the requisite homogeneity. The consensus of professionals in the field is that each target minority group should have its own focus group.

Krueger (1988:92) notes one caveat even for relatively homogeneous groups: some mixes of participants do not work well because of limited understanding of other lifestyles and situations:

...care must be exercised in mixing individuals from different life stages and styles-young working women with homemakers in their fifties who have not been employed outside of the home- unless the topic clearly cuts across these life stages and styles. Often participants will be inhibited and defer to those whom they perceive to be more experienced, knowledgeable, or better educated. A small degree of variation within group characteristics is often a helpful way to obtain the contrast and variation that spark lively discussions. Unfortunately, it doesn't work well to divide the group up into thirds with equal numbers of from these contrasting groups and expect the discussion to be a forum of differing points of view. A more workable strategy is either to conduct a separate series of focus groups with each segment or to target the most important group if resources are limited.

This was the strategy employed for the six focus groups conducted with Native Americans in 1997 (Dunn and Feather 1998).

Size: What is the ideal size of a focus group? Krueger (1988) argues that the ideal focus group is composed of seven to ten people with similar backgrounds. Focus groups with more than twelve participants are not recommended. They limit each person's opportunity to share insights and observations. In addition, group dynamics change when participants are not able to describe their experiences. Krueger note that if people do not have an opportunity to share experiences in the total group, they may lean over to the next person to whisper observations. This phenomenon is clearly a signal that the group is too large. Small focus groups or mini-focus groups with four to six participants are becoming increasingly popular because the smaller groups are easier to recruit and host and more comfortable for participants. The disadvantage of these smaller groups is that because the group is smaller there will be fewer total experiences to share.

The nature of the "questioning route" (sequencing of questions) and participant characteristics yield clues as to the ideal size. For specialized audiences where the intent is to get more in-depth insights, smaller groups usually work best. Also, smaller groups are preferable when the participants have a great deal to share due to intense or lengthy experiences with the topic at hand. In discussions where the researcher wants to discover the range of perceptions in more general terms, larger groups are preferable (Krueger 1988)

Recruitment: What is the way best to identify and recruit focus group participants? The most commonly used procedures include using existing lists, contacting existing groups, seeking referrals from current participants, and random telephone screening. Krueger (1988) notes that a less common procedure, but one useful for some nonprofit organizations, is to recruit on location, such as at a park, a fair, or a community event. This was the method used by rangers at the five Corps lakes visited in 1998.

One of the most convenient ways of finding focus group participants is to use existing lists of people. In a general business context, this could include lists of clients, members, or those who use the organization's services. Such lists may or may not be up to date. Sampling strategies may also be required when the lists are extensive.

An alternative strategy to the use of lists is to contact other groups (e.g., local community organizations) for names. Once the target audience has been identified and the necessary characteristics for selection have been determined, the researcher might investigate whether existing groups in the community have members with those characteristics. Krueger (1988) notes that cooperation with other groups is more likely if the researcher explains that there will be no selling, that volunteers can decline to participate, and that participants will receive some kind of compensation. Ranger Dave Quebedeaux recruited focus group participants at Canyon Lake, TX, with the promise of camping fees being waived for a period of time.

Another recruitment method is to request names from past focus group participants. This approach works only where there is an adequate time delay between focus groups and when the rewards of participation are obvious. Another variation is the "snowball sampling" procedure. With this snowball approach, the invited participant is requested to bring a friend to the discussion.

Telephone screening typically begins by random selection of names from a telephone directory. A series of screening questions are used to determine if those called meet the criteria established for the focus group. This method is a favorite of many market research firms because they are able to control the quantity of calls and consequently the number who will be attending the group interview. Telephone screening is most efficient when searching for participants with fairly common characteristics. As the number of screens increases, the efficiency of this procedure will decrease. Krueger (1988:95) provides this example:

...in an effort to reach working homemakers, it was necessary to call 50 households in order to identify 25 working homemakers. Only 10 of these were able and willing to participate in a focus group interview at the designated time. If the screen had been more restrictive—for example, working homemakers with children between the ages of 5 and 10—then the efficiency of the calling procedure would decrease.

The efficiency of the telephone screening procedure is affected by the skills of the interviewer. Because invitations over the phone are often regarded with suspicion, those making the invitations should have considerable communication skill. Confidence, friendliness, and sincerity are the qualities that prove most successful.

Other Factors to Consider

Sampling Procedures: Randomization essentially removes the bias in selection; all participants possess an equivalent chance to be involved in the study. Random selection is particularly appropriate when inferences are made for a larger population because of the assumption that opinions, attitudes, or whatever being studied will be normally distributed within that population. Krueger (1988) notes that it is important to keep in mind that the intent of focus groups is not to infer but to understand, not to generalize but to determine the range of opinion, and not to make statements about the populations but to provide insights about how people perceive a situation. As a result, focus groups require a flexible research design, and while a degree of randomization may be used, it is not the primary factor in the selection of participants. While the overall purpose of the research should dictates the process of participant selection, the selection is also tempered by practical concerns and the credibility of the study.

Avoid Existing Groups: The focus group technique works well when all participants are on an equal basis. Existing groups may have formal or informal ways of relating to each other that can influence their responses. Krueger (1988) pays particular attention to superior-subordinate relationships among participants that can inhibit discussion. If supervisors, bosses, or even a friend of the boss is in the group, the results might be affected. In addition, there might be a reluctance to express negative observation in front of coworkers, especially if supervisors are present. Focus groups should be conducted without the presence of supervisors, and if necessary, a special group session can be conducted for supervisors.

Number of Focus Groups Needed: When compared to quantitative survey methods, the number of different individuals and groups involved in a focus group study is surprisingly small. The rule of thumb Krueger (1988:98) espouses is to continue conducting interviews until little new information is provided:

Typically, the first two groups provide a considerable amount of new information, but by the third or fourth session, a fair amount may have already been covered. If this occurs, there is limited value in continuing with additional group discussions with that particular audience segment. So, the suggested rule of thumb is to plan for four groups with similar audiences, but evaluate after the third group. If new insights are provided in the third group, then conduct the fourth and additional groups as needed.

More than four focus groups are advisable when participants are heterogeneous or when statewide or national-level insights are warranted. During the Native American research conducted during the spring and summer of 1997, a total of six focus groups in two different regions (Oklahoma and South Dakota) were used to gain a national perspective on Native American recreation at Corps of Engineers projects.

Attendance Problems: One of the major problems the Ethnic Culture work unit had to contend with was poor attendance at scheduled focus groups conducted in 1998. The reason was in large part the relative inexperience of the rangers who attempted to organize the focus groups at these projects. Krueger (1988) reports similar problems when he and his colleagues began conducting focus groups for nonprofit organizations. After they analyzed what had gone wrong, they discovered several major flaws in their traditional invitation process. When focus groups attendance was poor, it was because the invitations had not been personalized, there had been no follow-up to the original written invitation, people had been asked to attend a discussion on a seemingly insignificant topic, seasonal time demands on some audiences had not been reckoned with, existing social and organizational relationships had not been built upon, or incentives were not offered. The rectification of these flaws invariably produced a dramatic increase in focus groups attendance. Krueger goes on to make these specific logistical recommendations for good attendance (1988:100):

A positive, upbeat invitation; the opportunity to share opinions, meals, or refreshments; and tangible gifts are all helpful incentives for potential participants. So is a convenient and easy to find meeting location. It is also helpful if they know they will be participating in an important research project where their opinions will be of particular value....people are more likely to attend a focus group if the invitation builds on some existing community, social, or personal relationship. Thus an invitation might mention the connection between the study and a local organization.

Sponsor Identification: "Who is sponsoring this study?" This was asked at every focus group conducted for the Ethnic Culture work unit. The focus group conducted with Native Americans in Anadarko, OK, presented earlier, is the quintessential example of participant suspicion of the sponsor's motives. Krueger maintains it is best to have a generic response to the question of sponsorship that provides an answer without influencing later responses (1988:101):

When a market research firm offers invitations to a focus group interview, they will use their agency name and letterhead but will not reveal the specific client or product being tested. They will describe it as a type or category of product, such as soft drinks, farm pesticides, or automobiles. Care is taken to avoid naming the specific product so that participants will not come with presuppositions. Excessive background information encourages participants to offer solutions to the client's problem as opposed to the intended purpose-that of identifying the nature of the problem.

Krueger urges nonprofit organizations (e.g., government agencies such as the Corps) conducting their own focus groups to give special thought to how they will respond to questions about the sponsorship of the study.

Premature revelation of the sponsor (or its intentions) can bias later responses by participants, and yet the sponsor's answer must be truthful. It may be sufficient to describe the sponsor (or its intentions) in a very general way to avoid the premature introduction of this sort of bias. For the Corps' purposes, it might be useful to conduct focus groups sessions on neutral ground away from Corps project offices. At the end of the focus groups session, the participants can be provided more specific information on the sponsorship and purpose of the study.

Analyzing Results of Focus Groups. The analysis of focus group interviews is a large topic which has received a great deal of attention from marketing professionals and social scientists interested in qualitative research methods. The brief discussion presented below is a synopsis of Krueger's (1988) detailed discussion on this topic.

The analysis process should begin with the assembling of the raw materials from all the focus groups conducted for a particular purpose. The goal is to get an overview of the entire process. It is easy to lose sight of the big picture in the myriad details recorded during the discussions. The researcher's (or project manager's) role must cover a continuum with the assembly of raw data on one extreme and verifiable interpretation on the other. The process of analysis should involve the consideration of words, tone, context, nonverbal gestures, internal consistency, specificity of responses, and the "big ideas" coming from all the focus groups which were conducted. Data reduction strategies in performing this analysis are critical. Most important, the analysis of focus group results must be systematic and verifiable. It must be a careful and deliberate process of examining, categorizing, and tabulating evidence. It must not be a collection of hunches, guesses, or wishes. Krueger (1988:119) provides a useful series of analysis tips which are listed below:

Focus Group Analysis Tips

Materials Needed

A copy of the questioning route Copies of all transcripts Tapes of all interviews Demographic information about the respondents Copies of moderator/facilitator's summaries or notes

- (1) Read all summaries in one sitting—make note of potential trends and patterns. Strongly held opinions and frequently held opinions are also noted.
- (2) If transcripts are available, read each transcript—mark sections of the transcript that relate to each question in the questioning route. Mark participant comments that may be worthy of future questions.

(3) Examine one question at a time—concentrate on one issue or question at a time. After all responses to a question have been examined, prepare a brief summary statement that describes the discussion. Attention is placed on identifying the themes or patterns across the groups as well as themes that relate to respondents with similar demographic characteristics.

When conducting the analysis

- (a) consider the words...
- (b) consider the context...
- (c) consider the internal consistency...
- (d) consider the specificity of responses...
- (e) find the big idea
- (4) Consider the purpose of the report—reflect back on the objectives of the study and the information needed by decision makers. The type and scope of the final report will guide the analysis process. For example, focus group reports typically fall into three categories: (a) brief oral reports that highlight key findings, (b) descriptive reports (oral and/or written) that summarize comments or observations of participants, and (c) analytical reports (oral and/or written) that highlight key trends or findings and also include selected comments as examples.

Surveys

The Issue of Group-Specific Questions

The OMB-approved survey instrument tested at five Corps projects during the spring and summer of 1999 (Appendix A) represents a set of core questions which can be used by Corps project managers to obtain baseline information on the recreational preferences and perceptions of their ethnic minority visitors. These questions are general enough that they can reasonably be used for any ethnic group. However, the issue of additional or optional questions that specifically pertain to each of the four ethnic groups is one that was raised in the 1995 Plan of Study as a research goal. Henderson (1995) argued that optional questions offered the opportunity to obtain new data on ethnic group recreation preferences and style and that information obtained from such group-specific questions would add significantly to the existing knowledge base.

Major Themes and Sample Questions

Group-specific questions must fit the target audience and the needs of managers if they are to be effective. In order to develop group-specific questions, it is critical to keep in mind both the socioeconomic profile of each ethnic group and what is already known about its recreational preferences. Listed below are major themes for each group as well as sample questions. These group-specific questions supplement the core questions in Appendix A. They do not replace them. The sample questions shown below should only be regarded as a starting point for developing project-specific surveys in the future.

Native American Themes

- · Low educational attainment overall; varies greatly by tribe
- Large household size
- 30 percent classified as poor; poverty rate varies greatly by tribe
- · Perceived discrimination greatest among least acculturated groups
- Strong desire to preserve cultural traditions and core values, language
- Preference for recreating in large groups, extended families (lineages, clans)
- · Social dancing major recreational interest for most tribes
- Subsistence and recreational activities closely linked (hunting, fishing, food collecting, outdoor cooking)

Sample Group-Specific Questions

- What is your tribal affiliation?
- How many people live together in your household?
- Do you prefer to recreate with members of your lineage or clan?
- What is your highest level of education? grammar school_____, high school_____, college____
- What is your favorite form of recreation within your cultural tradition?
- What is your favorite form of Indian dancing?
- How often do you attend powwows?
- Do you attend the powwows of other tribes?
- Would you like to attend a pan-Indian powwow held at a Corps lake?
- What facilities for dancing, powwows etc. would you like the Corps to construct?

African American Themes

- Female-headed households majority (58 percent) household type
- Rising black middle-class; linked to greater educational attainment
- Increasing black emigration to the urban South; reverses 19th century migration to the North

- Large population centers in major cities of the North; little experience with water resources
- Strong sense of community; large family reunions; community events
- Strong interest in team sports not linked to water
- Low rate of boat ownership among working class blacks; low interest in water based recreation
- Low rate of camping by the majority of black visitors; day users are the majority of the Corps' customers

Sample Group-Specific Questions

- Please describe your residential household, i.e., number of adults and children living together.
- Do you want your children to attend college? Why?
- Based on your average yearly income do you consider yourself working class , middle-class _____, upper-class _____
- Have you always lived where you do now? If not, please describe your families' move(s) in general regional terms
- Does your family have get-togethers or reunions on a regular basis? If so, how many people might attend?
- Are you a member of a sports team, e.g., basketball, baseball, softball, etc.?
- What sports do you enjoy playing on a regular basis?
- Do you own a boat or personal water craft?
- Have you ever gone camping at a Corps lake? If so, which one?

Hispanic American Themes

- Fastest growing minority group; projected to catch black Americans in 2009
- Strong tradition of familism; large extended families enjoy recreating together
- Overall low educational attainment; linked to high immigration (legal and illegal) from other Latin American countries: many Hispanics bilingual
- Majority of Hispanic families have children under 18; women less likely to work outside home
- Strong cultural traditions; strong sense of ethnic identity as expressed in the phrase "La Raza y la Familia"
- Strong interest in outdoor camping, cooking in large family groups
- Median income declining; linked to high rate of immigration of Hispanics from poor countries
- Moderate interest in water-based recreation in long-time residents (multiple generations in U.S.)

Sample Group-Specific Questions

- How large is your family?
- How many adults and children reside together in your household?
- How many members of your family usually recreate together when you visit a Corps lake?
- Do you have relatives outside the U.S.? If so, are they interested in immigrating to the U.S.?
- Do you consider yourself bilingual (fluent in English and Spanish)? Are your children bilingual?
- Do you consider the Corps facilities adequate for your family? If not, please explain
- What water-based recreation does your family enjoy? If none, please explain.
- Describe your ideal family outing.
- Do you feel comfortable recreating with members of other racial or ethnic groups? If not, please explain.

Asian American Themes

- · High educational attainment overall; varies by region of origin
- Median income higher than the national average; both husband and wife likely to be in labor force
- Asian households more likely to be headed by married couples than the national average
- High level of acculturation among long-term residents (multiple generations); acculturated Asian Americans share same interests in boating and camping as white Americans
- Population strongly regionalized in California, Pacific Coastal states
- Strong interest in cultural activities; preference for pavilions, amphitheaters
- Least acculturated groups (e.g., SE Asians) strongly focused on subsistence activities such as fishing and hunting
- Interest in interpretive displays, educational activities for children
- Use of day use areas by large family groups; preference for children's playground equipment, ball fields, larger picnic shelters

Sample Group-Specific Questions

- Where is your family's ancestral homeland?
- How long have you lived in the U.S.? How long has your family lived here?
- Do you consider yourself more American or Asian? Why?
- Do you consider yourself fluent in English? What other languages do you speak?

- Based on your average yearly income do you consider yourself working class , middle-class , upper-class _____?
- What is your favorite form of recreation within your cultural tradition? What is your favorite form of American-style recreation?
- Does your family enjoy camping out? If so, how many family members typically camp together?
- Do you think it is important to preserve the cultural traditions of your ethnic group? If so, why?
- Would you prefer America to have a single "melting pot" culture or try to keep a mosaic of different cultural traditions?
- What recreational facilities would you like the Corps to construct for your children's future enjoyment?

Community Outreach Efforts

The results of nine different focus groups conducted in 1997 and 1998 consistently showed that, from the perspective of its ethnic minority visitors, the Corps could do a much better job of reaching out to ethnic minority communities. This may come as a shock to many Corps project managers who take pride in their community spirit and serve as leaders in their local communities. But in many cases they are leaders in a white middle-class interaction sphere. Their economic development efforts do not reach their minority customers, who may not even reside in the immediate area. In many cases minority visitors are not targeted in the same way as the majority white population. As a first step toward improving this situation, Corps project managers should consider improving their outreach to minority communities in three ways. Each is important for meeting the challenge of providing quality customer service in an ethnically diverse America.

Identify source areas for minority visitation to Corps projects

Many Corps projects are located in rural settings that lack a large resident minority population. Carlyle Lake in west-central Illinois farm country exemplifies this situation. Minority visitation to this project comes mostly from the relatively distant St. Louis metropolitan area since the project is located in a county that is more than 95 percent white. Many of the low-income black visitors to Carlyle Lake come from East St. Louis, IL, about fifty miles west of the project. Carlyle is only now beginning to make a serious effort to identify specific source areas for its minority visitors. All Corps projects should begin the process of reaching out to their minority customers by identifying where they come from. The data acquisition methodologies discussed in this report can assist in this effort. As an initial step, project personnel should talk to their minority customers and get to know them.

Work with community leaders and minority development groups in these source areas

The very positive relationship observed between the Corps staff and black visitors to Woodruff Lake, AL, owes a great deal to the Corps manager's cordial relations with community leaders in the surrounding region. Lowndes County, AL, is predominantly black, by a margin of 3 to 1. It seems only natural that the local Corps managers should strive to have good working and personal relations with black leaders there.

The Corps' future challenge will be to have such fine relations with minority leaders and organizations when the demographic situation is reversed, when minority populations are really in the minority. Do Corps managers now make serious proactive efforts to work with minority leaders and organizations in their respective regions? The honest answer is maybe, depending on the leadership qualities and the personal initiative of the individual manager. All Corps project managers should identify these minority leaders and organizations in their visitor source areas, communicate their willingness to work with them, and seek opportunities for hosting minority community activities at their project. Make them understand that the phrase "The Corps Cares" really means something.

Work with social welfare agencies in source areas

Many minority visitors to Corps projects are economically disadvantaged and must seek assistance from social welfare agencies that provide assistance with day-to-day living arrangements, child care, and a host of other social problems. In Fresno, CA, the major source area for Asian American visitation to the Pine Flat and Hensley Lake projects, there are over a dozen such social welfare agencies serving the diverse Asian community. When contacted by the author during his visit in 1998, only a few had heard of these two Corps projects or actually visited them. Corps managers should regularly communicate with minority welfare agencies and let them know what facilities are available to their minority clients. Interpreted tours dealing with natural and cultural resources located at the project would be especially well received, according to the results of the focus groups. Corps managers should look for opportunities to involve the minority populations in identified source areas in the operation of Corps projects, e.g., as host communities for project activities of all sorts. This desire was consistently identified in all of the focus groups conducted for the work unit.

7 Summary and Conclusions

Looking Back...Looking Forward

Since its creation in 1995, the Ethnic Culture work unit has utilized an extensive literature review (Gramann 1996), interviews with Corps project personnel and visitors, focus groups, and user surveys to identify and describe distinctively different recreation styles for the following four minority groups: Native Americans, African Americans, Asian Americans, and Hispanic Americans. One finding of the initial literature review, which has been substantiated through subsequent fieldwork, is that the process of cultural assimilation or "acculturation" may modify the recreation style of an ethnic minority group but does not eradicate the group's recreational stylistic differences. The reason for this is that recreation, unlike activities directly tied to economic survival, is an "expressive behavior" that preserves and transmits the core cultural values of the ethnic group. So long as the group's culture remains intact, the core values will be preserved and expressed in certain expressive behaviors such as recreation.

The work unit has also identified several factors in the Corps' current management and policy that now act to inhibit recreation participation by minority groups, e.g., perceived discrimination, facilities unsuitable for the average ethnic group size, communication problems, and numerous others. For each of the four groups which have been studied, a Tech Note has been prepared in which recommendations for changes in Corps facilities, services, and policies have been made that should help the Corps better serve the needs of its minority customers in the future. Information developed by this work unit should be used for future Corps decisions on facilities upgrades and operational changes. This process in now underway at HQUSACE and at ERDC.

Traditionally, the Corps has designed its recreational facilities with a specific customer base in mind, white middle-class nuclear families. This traditional customer base will continue to exert a powerful economic influence as baby-boomers reach their peak earning years and then begin to retire in greater and greater numbers. This large population of white middle-class baby-boomers and their families requires recreational facilities

for its relatively affluent recreational interests (e.g., camping with recreational vehicles, the increasing use of personal water craft, sailing and power boats), and the Corps should continue to accommodate its needs. Yet Corps of Engineers projects must serve all the American public. They cannot and should not cater to any one age group or ethnic/racial group.

Ethnic minority groups in the United States are strongly regionalized and urbanized (with the exception of Native Americans), and these trends are projected to continue. Urban minority visitors to Corps of Engineers projects can have very different needs and expectations than the Corps' traditional customers. Ethnic minority visitors to Corps projects are coming in ever greater contact with white middle-class baby-boomers with different recreational habits and preferences. This trend is projected to increase as more baby-boomers begin to retire and minority populations continue to increase. The growing number of minority visitors coming from urban areas require facilities to accommodate their distinctive recreational styles, and the Corps of Engineers, a federal agency with a heavy investment in recreation, has been directed by two Executive Orders to accommodate their needs as well. The problem, stated succinctly, is this: How does the Corps accommodate both the traditional and the nontraditional user? How does the Corps rehabilitate its aging infrastructure to meet the needs of its minority customers? How does the Corps resolve, or better still, prevent recreation use conflicts between its traditional (white middle-class) customers and the ever-increasing number of minority visitors? How can the Corps be "all things to all people"?

Many Corps of Engineers projects have already begun to encounter difficulties in accommodating ethnic minority customers. This is the reason the Ethnic Culture work unit was created in 1995. Certain rural regions of the northern U.S. still have a mostly white visitor base. Corps projects there will be primarily coping with the increasing demands of the white middle-class baby-boomer population. But Corps projects near major metropolitan areas in the southeast and southwest United States, in California, and near large metropolitan areas of the northern U.S. are having difficulties coping with the growing numbers of minorities with different recreational needs. Some of these difficulties have been documented in the four Tech Notes prepared by the Ethnic Culture work unit.

The most noticeable effects of the projected convergence and anticipated conflict between traditional and nontraditional users will be in those regions of the United States which currently have large minority populations—the Southwest and California (Hispanic Americans); the Southeast and metropolitan areas in the North (African Americans); California and the other Pacific Coast states (Asian Americans); and the Northern and Southern Plains and the Pacific Northwest (Native Americans). Clearly, techniques need to be developed to cope with America's ever increasing ethnic diversity. At the outset, methods for data acquisition must be developed before effective management decisions with long-term effects can be made.

Methodological Complementarity

This report has presented two complementary methods for obtaining information on the recreational preferences and perceptions of the four major ethnic minority groups distinguished by the U.S. Bureau of the Census. Through the combined use of focus groups and user surveys (such as the one included in Appendix A), Corps project managers will be able to fine tune their services and upgrade their facilities to meet the needs of their ethnic minority customers.

With regard to the use of focus groups, ERDC research has shown them to be most effective with the least acculturated ethnic groups who do not respond well to traditional surveys (e.g., Native Americans and Southeast Asian groups). However, conducting a series (3 to 4) of focus groups is highly recommended prior to the administration of a survey instrument to any of the four minority groups discussed here. Focus groups provide an opportunity to ask follow-up questions, to probe into problem areas, and to understand the other person's world view as much as is possible for a cultural outsider.

When administering a survey instrument such as the one shown in Appendix 1, a personal interview format should be used in lieu of a telephone survey and the interview conducted by members of the same ethnic or racial group, if possible. The use of black rangers at Woodruff Lake in Alabama greatly facilitated the African American survey there. Having an Asian graduate student fluent in several Southeast Asian languages work with the rangers at Pine Flat and Hensley Lakes was critical to the success of those surveys. During the focus group sessions, minority participants said they felt much more comfortable and communicative when interacting with members of their own ethnic group. Even when this is not possible, using facilitators and interviewers with good people skills and some familiarity with the minorities' culture and language is very important to achieving good results. When dealing with first-generation immigrant ethnic groups who do not speak English very well, the use of a skilled interpreter is essential.

Overall, the best results, the most comprehensive picture, came from combining focus groups and surveys. A careful review of the four published Tech Notes and the results of the test survey at five Corps lakes during the spring and summer of 1999 shows that the same broad trends regarding recreation preferences and experiences appear with each method. However, details came out in the focus groups with Asian, Hispanic, and African Americans that did not appear in the survey. Likewise, some information on the survey sheets was never discussed in the focus groups. This occurred most often when the survey was administered by a member of the respondents' own ethnic group.

Focus groups provide a very deep look into the perceptions of a relatively small group of people, probably less than 50 people assuming four focus groups were to be conducted at a given Corps lake. Their life experiences and perceptions constitute a small but detailed sample of the total universe of preferences and perceptions. Traditional user surveys provide a much broader view of the perceptions of a much larger group of people, possibly several hundred. But with no follow-up questioning, important details are often lost.

Need for Future Research

The Ethnic Culture work unit conducted a broad-brush investigation of four ethnic minority groups. This investigation should only be regarded as a first step. Such "intra-ethnic" research needs to continue, especially among the two largest minority groups, African and Hispanic Americans, who will have the greatest future impact on the Corps' recreation program. In addition, research is needed on the "inter-ethnic" aspects of recreational behavior involving the interaction of different ethnic groups (e.g., blacks and whites), particularly when those groups are at vastly different socioeconomic levels. Future research is clearly needed in the following areas:

- (1) Investigate urban source visitation to Corps projects by traditional and nontraditional users; provide a rigorous statistical analysis of the current and projected trends for minority recreation; investigate the rate of projected recreational growth among minorities for the major regions of the U.S. with high percentages of minorities; identify and develop census data on a county-by-county basis in those areas.
- (2) Identify more precisely desired customer services; conduct demand analyses for each major ethnic minority group (e.g., African and Hispanic Americans); identify infrastructural improvements that would benefit minority recreation.
- (3) Investigate in greater detail how major CE programs in water safety, interpretation, etc., could be improved to benefit ethnic minority visitors while continuing to serve the needs of its traditional customer base.
- (4) Determine through fieldwork and published case studies how best to cope with serious communication problems that currently exist in regions of the U.S. with minority populations, e.g., numerous Asian languages and an increasing number of Hispanics visiting CE projects.
- (5) Conduct additional data acquisition on recreational habits and preferences of the least studied minority groups, e.g., highly diverse Asian groups and low-income African Americans.

- (6) Identify and analyze existing Corps projects which have successfully coped with the needs of traditional and nontraditional users; identify those factors, such as the redesign of Comal Park at Canyon Lake, TX, that make certain projects (or parks) so successful, i.e., appeal to the aging white majority population as well as urban minority visitors.
- (7) Identify institutional policy and process changes the Corps will need to make in order to successfully meet the needs of traditional and nontraditional users during the first 30 years of the 21st century.

In summary, highly focused research will be needed to solve the Corps' "ethnic diversity problem" or, more accurately put, prevent the development of a major problem in the future. The knowledge the Corps will need to accomplish this includes:

- Knowledge of "where we are" (current visitation) and "where we are going" (projected trends) in providing services to ethnic minorities; specific knowledge of current regional differences and projected trends for these regions.
- Knowledge of how to cope with the communication problems the Corps now has with Hispanics and the diverse Asian groups; specific proactive approaches in training and recruitment of Corps personnel.
- Knowledge of how to rehabilitate the Corps' aging recreational infrastructure to best meet the needs of an ethnically diverse visitor population; of the types of "universal" facilities that appeal to traditional and nontraditional visitors alike, e.g., children's playgrounds, sports facilities, water-based recreation, facilities for community activities, etc.
- Knowledge of the types of "special" facilities that appeal to each of the four major ethnic minority groups (Native, African, Asian, and Hispanic Americans), e.g., Native American dance arbors and facilities for cultural interpretation, larger shelters with cooking facilities for large extended Hispanic and African American families, fishing piers and interpretive facilities for Asian Americans, sports facilities for African American youth.
- Knowledge of the facilities that will most appeal to the traditional Corps visitor population as the baby-boomer generation achieves economic prominence and moves into retirement age, e.g., campgrounds for RVs, marinas, special facilities for personal watercraft, etc.
- Knowledge of what constitutes the best mix of "special" and "universal" facilities for CE projects in different regions of the U.S., (what works in rural Alabama may not work in urban California); how to design parks that work for an ethnically diverse group of visitors.

• Knowledge of the changes in CE infrastructure and policy that will be needed in the future; how to operationalize this knowledge into policies, designs, schedules, and budgets; the development of operational guidelines for Corps project managers and the preparation of specific recommendations for Corps policymakers.

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Appendix A OMB-Approved Survey Instrument

Ethnic Minority User Survey

(Personal Interview)
OMB 0710-0001
Expires: 31 March 2002

The public report burden for this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this data collection, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, Virginia 22202-4302, and the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503, Attn: Desk Officer for U.S. Army Corps of Engineers. Respondents should be aware that notwithstanding any other provision of law, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Please DO NOT RETURN your completed form to either of these addresses.

Ethnic Minority User Survey

Date	Reservoir
	Day Has Area
Time	Day Use Area
Boat Ramp	Honor Box
Beach Area	Attended Gate
Camping Area	
"Hello. My name is	I am conducting a sur-
vey of minority recreation visitors	. I am conducting a surs to Corps of Engineers projects. We are
interested in learning about your o	outdoor recreation habits and preferences
and we would also like to ask for	your opinions and perceptions of how
Corps lakes in general are being n	nanaged. Would you be willing to take
about ten minutes to answer some	questions?" (If yes) "We are trying to
get an honest assessment of Corps	facilities and management style, so
please know that all your response	es are confidential."
produce know that any your response	
(Note to Interviewer: please re	cord the following observations concern-
ing the respondent: say	_, approximate age, type of
group membership	, ,
ethnicity/subgroup	·)
Category 1: Outdoor Recreat	tion Style
1. What are your favorite forms o	of outdoor recreation?
Ž	
2 What is the average size group	you bring to the Corps lake when you
visit?	you oming to the corps tone water you
VISIT:	
3. How many people are in your g	group today?Total
How many:males	females under 17

- 4. Do you prefer primitive camping areas or campgrounds with developed facilities and services (electrical hookups, toilets, etc.)?
- 5. What do you find attractive about this site/lake?
- 6. What do you find unattractive about this site/lake?
- 7. Do you think that the Corps should preserve wild/undeveloped areas around its lakes whenever possible?
- 8. What forms of outdoor recreation might you wish to try in the future?
- 9. Is English your primary language?
 - 9a. If not, what is your primary language?
 - 9b. If not, do language problems make it difficult for you or members of your family to understand the signs posted at the lakes?
 - 9c. If not, do language problems make it difficult for you or members of your family to understand the verbal instructions of Corps rangers at the lakes?

Category 2: Recreation Participation at Corps Projects

- 10. How often do you visit Corps lakes?
- 11. How long does it take to travel to your favorite Corps lake?

- 12. Does lack of public transportation prevent you from visiting Corps lakes as often as you would like?13. What water-based recreation activities do you participate in at Corps lakes?
- 14. What other outdoor recreational activities do you participate in at Corps lakes (e.g., softball, etc.)?
- 15. What activities would you like to have at Corps lakes that you do not have now?
- 16. What facilities would you like to have at your favorite Corps lake that you do not have now?
- 17. Do you feel safe when visiting a Corps lake? Why?
- 18. Do you believe that the Corps managers and rangers make you feel welcome at Corps' lakes? Why?
- 19. Do you ever visit interpretive displays about natural or cultural resources or enjoy the nature trails at Corps lakes?
- 20. Have you felt discriminated against because of your racial/ethnic background at a Corps lake? If so, please explain.
- 21. Do you think that the Corps is doing a good job of providing quality recreation for minorities? Why?

22. How could the Corps improve its recreational facilities for your family's enjoyment in the future?

Appendix B Data Sources for Socioeconomic Profiles (selected tables from Russell (1998))

Native Americans

Educational Attainment of Native Americans by Tribe, 1990

(percent of Native Americans aged 25 or older who are high school or college graduates, by tribe, 1990; ranked alphabetically)

	high school graduates	college graduates
Total, aged 25 or older	65.6%	9.4%
Alaskan Athabaskans	65.1	5.1
Apache	63.8	6.9
Blackfoot	71.4	9.5
Canadian and Latin American	59.0	10.5
Cherokee	68.2	11.1
Cheyenne	69.5	6.9
Chickasaw	74.2	14.6
Chippewa	69.7	8.2
Choctaw	70.3	13.3
Comanche	74.2	14.2
Creek	73.2	12.7
Iroquois	71.9	11.3
Lumbee	51.6	9.4
Navajo	51.0	4.5
Osage	86.7	22.1
Paiute	66.2	5.4
Pima	47.5	2.8
Potawatomi	76.5	14.4
Pueblo	71.5	7.3
Puget Sound Salish	69.1	7.7
Seminole	70.5	11.1
Sioux	69.7	8.9
Tlingit	73.3	6.7
Tohono O'Odham	53.4	1.2
Yaqui	48.5	4.3

Source: Bureau of the Census, Characteristics of American Indians by Tribe and Language, 1990 Census of Population, CP-3-7, 1994

Native American High School and College Graduates by State, 1990

(percent of Native Americans aged 25 or older who are high school or college graduates, by state, 1990)

	high school graduates	college graduates		high school graduates	college graduates
United States	65.5%	9.3%	Missouri	65.1%	11.0%
Alabama	64.9	11.6	Montana	68.1	7.9
Alaska	63.1	4.1	Nebraska	69.0	8.8
Arizona	52.1	4.6	Nevada	69.8	8.0
Arkansas	65.4	9.8	New Hampshire	65.9	16.0
California	71.4	11.1	New Jersey	66.9	14.8
Colorado	73.9	12.1	New Mexico	58.2	5.8
Connecticut	68.9	12.5	New York	65.2	13.4
Delaware	62.0	10.2	North Carolina	51.5	7.9
District of Columbia	66.3	17.7	North Dakota	64.3	8.3
Florida	68.2	11.5	Ohio	65.3	8.3
Georgia	71.6	12.5	Oklahoma	68.1	10.8
Hawaii	84.4	17.7	Oregon	71.0	8.3
Idaho	68.1	7.2	Pennsylvania	67.8	12.0
Illinois	71.4	13.4	Rhode Island	64.5	8.3
Indiana	65.0	8.4	South Carolina	62.5	10.9
Iowa	67.6	9.7	South Dakota	62.5	6.8
Kansas	75.4	10.8	Tennessee	63.1	10.5
Kentucky	59.8	8.0	Texas	70.9	13.9
Louisiana	49.1	5.5	Utah	59.3	6.4
Maine	69.9	7.7	Vermont	66.8	11.1
Maryland	73.4	19.7	Virginia	70. 7	14.7
Massachusetts	71.1	14.9	Washington	72.3	9.1
Michigan	67.8	7.6	West Virginia	57.9	6.5
Minnesota	68.2	7.7	Wisconsin	66.8	5.5
Mississippi	57.4	8.1	Wyoming	68.2	6.2

Source: National Center for Education Statistics, Digest of Education Statistics 1993, NCES 93-292, 1993; calculations by New Strategist

Health Indicators for Native Americans, 1993 and 1994

(selected indicators of total population and Native American health status, and index of Native American health indicators to total, 1993 and 1994)

	total population indicator	Native American Indicator	index
Infant mortality rate (deaths before age 1 per 1,000 live births), 1993	8.4	11.3	135
Total deaths per 100,000 population, 1993	513.3	468.9	91
Motor vehicle crash deaths per 100,000 population, 1993	16.0	32.3	202
Work-related injury deaths per 100,000 people aged 16 or older, 1994	3.3	3.2	97
Suicides per 100,000 population, 1993	11.3	12.1	107
Homicides per 100,000 population, 1993	10.7	11.0	103
Lung cancer deaths per 100,000 population, 1993	39.3	22.0	56
Female breast cancer deaths per 100,000 population, 1993	21.5	9.4	44
Cardiovascular disease deaths per 100,000 population, 1993	181.8	136.0	75
Heart disease deaths per 100,000 population, 1993	145.3	108.9	75
Stroke deaths per 100,000 population, 1993	26.5	20.7	78
Reported incidence of AIDS per 100,000 population, 1994*	26.9	12.1	45
Reported incidence of tuberculosis per 100,000 population, 1994*	9.4	17.4	185
Reported incidence of syphilis per 100,000 population, 1994*	8.1	2.0	25
Prevalence of low birth weight, as percent of total live births, 1994	7.3	6.4	88
Births to girls aged 10 to 17, as percent of total live births, 1994	5.3	8.7	164
Percent of mothers without care, first trimester of pregnancy, 1994	19.8	34.8	176
Percent under age 18 living in poverty, 1994	21.8	-	-
Percent living in counties exceeding U.S. air quality standards, 1994	24.9	20.0	80

^{*} Data are for the non-Hispanic Native American population.

Note: (-) means data are not available. The index for each indicator is calculated by dividing the Native American figure by the total population figure and multiplying by 100. For example, the index of 135 in the first row indicates that Native American infant mortality is 35 percent above the rate for all infants.

Source: National Center for Health Statistics, Health Status Indicators by Race and Hispanic Origin, Healthy People 2000 Review, 1995-96; calculations by New Strategist

Native American Households by Household Type, 1990

(number and percent distribution of Native American households by type, 1990; numbers in thousands)

	number	percent
Total households	605	100.0%
Family households	449	74.3
Married couples	296	48.9
With children under age 18	172	28.5
Without children under age 18	123	20.4
Female householder, no spouse present	118	19.5
With children under age 18	78	13.0
Without children under age 18	39	6.5
Male householder, no spouse present	36	5.9
Nonfamily households	156	25.7
Living alone	122	20.1

Source: Bureau of the Census, Characteristics of American Indians by Tribe and Language, 1990 Census of Population, CP-3-7, 1994; calculations by New Strategist

Native American Households by Size, 1990

(number and percent distribution of Native American households by size, 1990; numbers in thousands)

	number	percent
Total households	605	100.09
One person	122	20.1
Two persons	153	25.2
Three persons	113	18.7
Four persons	101	16.7
Five persons	61	10.1
Six persons	30	4.9
Seven or more persons	25	4.2

Source: Bureau of the Census, Characteristics of American Indians by Tribe and Language, 1990 Census of Population, CP-3-7, 1994; calculations by New Strategist

Household Income of Native Americans by Tribe, 1989

(median household income of the 25 largest Native American tribes, ranked by income, 1989)

	median household income
Osage	\$29,211
Tlingit	28,703
Canadian and Latin American	24,502
Potawatomi	23,722
Iroquois	23,460
Chickasaw	23,325
Comanche	22,958
Cherokee	21,922
Creek	21,913
Lumbee	21,708
Choctaw	21,640
Seminole	21,633
Blackfoot	20,860
Puget Sound Salish	19,191
Paiute	19,154
Pueblo	19,097
Chippewa	18,801
Yaqui	18,667
Apache	18,484
Alaskan Athabaskans	17,348
Cheyenne	16,371
Sioux	15,611
Navajo	12,817
Pima	12,063
Tohono O'Odham	11,402

Source: Bureau of the Census, Characteristics of American Indians by Tribe and Language, 1990 Census of Population, CP-3-7, 1994; calculations by New Strategist

Native Americans below the Poverty Level by Tribe, 1989

(number and percent of Native American persons and families below poverty level, for the 25 largest tribes, 1989; ranked by percent of persons in poverty; persons and families in thousands as of 1990)

	persons		families		
	number	percent	number	percent	
Total in poverty	585	31.2%	122	27.2%	
Tohono O'Odham	9	55.8	2	54.1	
Pima	8	53.3	2	53.6	
Navajo	108	48.8	21	47.3	
Sioux	46	44.4	9	39.4	
Cheyenne	5	42.3	1	35.8	
Yaqui	4	40.9	1	37.0	
Apache	19	37.5	4	31.8	
Chippewa	35	34.3	8	31.2	
Pueblo	18	33.2	4	31.2	
Blackfoot	11	30.9	3	27.6	
Puget Sound Salish	3	30.0	1	28.8	
Paiute	3	28.9	1	27.2	
Alaskan Athabaskans	4	28.1	1	28.6	
Seminole	4	27.6	1	22.6	
Comanche	3	27.5	1	20.9	
Creek	11	23.4	2	19.0	
Canadian and Latin American	6	23.1	1	19.9	
Choctaw	19	23.0	4	19.9	
Lumbee	11	22.1	. 3	20.2	
Cherokee	79	22.0	19	19.4	
Chickasaw	5	21.4	1	17.0	
Potawatomi	3	21.1	1	17.3	
Iroquois	10	20.1	2	17.3	
Osage	2	15.9	-	16.4	
Tlingit	2	15.8	-	14.9	

Note: (-) means less than 500.

Source: Bureau of the Census, Characteristics of American Indians by Tribe and Language, 1990 Census of

Population, CP-3-7, 1994; calculations by New Strategist

Native Americans by Occupation, 1990

(number and percent distribution of employed Native Americans aged 16 or older by occupation, and Native Americans as a percent of total employed workers by occupation, 1990; numbers in thousands)

	number	percent	share of total workers
Total employed, aged 16 or older	706	100.0%	0.6%
Executive, administrative, and managerial	61	8.6	0.4
Professional specialty	68	9.7	0.4
Technicians and related support	23	3.2	0.5
Sales	61	8.7	0.4
Administrative support, including clerical	104	14.8	0.6
Private household	4	0.5	0.6
Protective service	17	2.4	0.9
Service occupations, except protective and household	109	15.5	0.9
Farming, forestry, and fishing	24	3.4	0.8
Precision production, craft, and repair	97	13.8	0.7
Machine operators, assemblers, and inspectors	59	8.4	0.7
Transportation and material moving	38	5.4	0.8
Handlers, equipment cleaners, helpers, and laborers	40	5.7	0.9

Source: Bureau of the Census, Characteristics of American Indians by Tribe and Language, 1990 Census of Population, CP-3-7, 1994; calculations by New Strategist

African Americans

Educational Attainment of Blacks by Sex, 1996

(number and percent distribution of blacks aged 25 or older by educational attainment and sex, 1996; numbers in thousands)

	1	rotal .	men		women	
	number	percent	number	percent	number	percent
Total, aged 25 or older	18,715	100.0%	8,286	100.0%	10,429	100.0%
Not a high school graduate	4,819	25.7	2,133	25.7	2,687	25.8
High school graduate or more	13,896	74.3	6,154	74.3	7,742	74.2
High school graduate only	6,576	35.1	3,107	37.5	3,468	33.3
Some college or assoc. degree	4,769	25.5	2,020	24.4	2,750	26.4
Bachelor's degree or more	2,551	13.6	1,027	12.4	1,524	14.6
Bachelor's degree only	1,868	10.0	715	8.6	1,153	11.1
Master's degree	530	2.8	225	2.7	305	2.9
Professional degree	78	0.4	36	0.4	42	0.4
Doctoral degree	75	0.4	51	0.6	24	0.2

Source: Bureau of the Census, Educational Attainment in the United States: March 1996, Current Population Reports, P20-493, 1997; calculations by New Strategist

Black High School and College Graduates by State, 1990

(percent of blacks aged 25 or older who are high school or college graduates, by state, 1990)

,1	· ·	_			
	high school graduate or more	college graduate		high school graduate or more	college graduate
United States	63.1%	11.4%	Missouri	65.1%	11.2%
Alabama	54.6	9.3	Montana	80.9	18.4
Alaska	88.2	14.1	Nebraska	73.2	12.4
Arizona	75.1	14.3	Nevada	70.8	9.0
Arkansas	51.5	8.4	New Hampshire	86.1	25.7
California	75.6	14.8	New Jersey	67.0	13.6
Colorado	80.8	17.1	New Mexico	74.7	14.2
Connecticut	67.0	12.3	New York	64.7	12.6
Delaware	63.2	10.6	North Carolina	58.1	9.5
District of Columbia	63.8	15.3	North Dakota	95.9	17.1
Florida	56.4	9.8	Ohio	64.6	9.1
Georgia	58.6	11.0	Oklahoma	70.1	12.0
Hawaii	94.2	15.2	Oregon	75.0	9.1
Idaho	82.8	15.8	Pennsylvania	63.5	10.0
Illinois	65.2	11.4	Rhode Island	65.9	12.7
Indiana	65.4	9.3	South Carolina	53.3	7.6
Iowa	70.1	12.8	South Dakota	82.2	24.1
Kansas	71.0	11.6	Tennessee	59.4	10.2
Kentucky	61.7	7.7	Texas	66.1	12.0
Louisiana	53.1	9.1	Utah	77.0	15.9
Maine	87.6	22.3	Vermont	82.9	30.5
Maryland	70.6	16.1	Virginia	60.3	11.1
Massachusetts	70.0	17.0	Washington	81.2	15.4
Michigan	64.9	10.1	West Virginia	64.7	10.9
Minnesota	76.2	17.5	Wisconsin	61.3	8.3
Mississippi	47.3	8.8	Wyoming	81.2	9.5
• •					

Source: National Center for Education Statistics, Digest of Education Statistics 1993, NCES 93-292, 1993

Health Indicators for Blacks, 1993 and 1994

(selected indicators of total population and black health status, and index of black health indicators to total, 1993 and 1994)

	total population indicator	black indicator	index
Infant mortality rate (deaths before age 1 per 1,000 live births), 1993	8.4	16.5	196
Total deaths per 100,000 population, 1993	513.3	785.2	153
Motor vehicle crash deaths per 100,000 population, 1993	16.0	16.3	102
Work-related injury deaths per 100,000 people aged 16 or older, 1994	3.3	3.1	94
Suicides per 100,000 population, 1993	11.3	7.2	64
Homicides per 100,000 population, 1993	10.7	40.9	382
Lung cancer deaths per 100,000 population, 1993	39.3	48.9	124
Female breast cancer deaths per 100,000 population, 1993	21.5	27.1	126
Cardiovascular disease deaths per 100,000 population, 1993	181.8	269.6	148
Heart disease deaths per 100,000 population, 1993	145.3	208.9	144
Stroke deaths per 100,000 population, 1993	26.5	45.0	170
Reported incidence of AIDS per 100,000 population, 1994*	26.9	93.3	347
Reported incidence of tuberculosis per 100,000 population, 1994*	9.4	26.8	285
Reported incidence of syphilis per 100,000 population, 1994*	8.1	59.5	735
Prevalence of low birth weight, as percent of total live births, 1994	7.3	13.2	181
Births to girls aged 10 to 17, as percent of total live births, 1994	5.3	10.8	204
Percent of mothers without care, first trimester of pregnancy, 1994	19.8	31.7	160
Percent under age 18 living in poverty, 1994	21.8	43.8	201
Percent living in counties exceeding U.S. air quality standards, 1994	24.9	29.6	119

^{*} Data are for the non-Hispanic black population.

Note: The index for each indicator is calculated by dividing the black figure by the total population figure and multiplying by 100. For example, the index of 196 in the first row indicates that black infant mortality is 96 percent above the rate for all infants.

Source: National Center for Health Statistics, Health Status Indicators by Race and Hispanic Origin, Healthy People 2000 Review, 1995-96; calculations by New Strategist

Births to Unmarried Black Women by Age, 1995

(number and percent of births to unmarried black women, by age; 1995)

	number	percent of total black births
Births to unmarried blacks	421,489	69.9%
Under age 15	5,876	99.1
Aged 15 to 19	127,241	95.2
Aged 20 to 24	145,134	79.1
Aged 25 to 29	75,815	56.8
Aged 30 to 34	44,690	46.5
Aged 35 to 39	19,271	45.3
Aged 40 or older	3,462	43.5

Source: National Center for Health Statistics, Births and Deaths: United States, 1996, Monthly Vital Statistics Report, Vol. 46, No.1, Supplement 2, 1997; calculations by New Strategist

Black Households by Household Type, 1996

(number and percent distribution of black households by type, 1996; numbers in thousands)

number	percent
11,577	100.0%
8,055	69.6
3,713	32.1
2,119	18.3
1,594	13.8
3,769	32.6
2,884	24.9
885	7.6
573	4.9
3,521	30.4
1,989	17.2
1,810	15.6
1,532	13.2
1,235	10.7
	11,577 8,055 3,713 2,119 1,594 3,769 2,884 885 573 3,521 1,989 1,810 1,532

Source: Bureau of the Census, Household and Family Characteristics: March 1996, Current Population Reports, P20-495 (Update), 1997; calculations by New Strategist

Living Arrangements of Black Children by Age, 1995

(number and percent distribution of black children by living arrangement, marital status of parent, and age of child, 1995; numbers in thousands)

	total	under age 6	aged 6 to 11	aged 12 to 17
Number with one or both parents	10,085	3,611	3,353	3,122
Living with both parents	3,746	1,169	1,363	1,214
Living with mother only	5,881	2,270	1,832	1,778
Never married	3,255	1,663	980	612
Divorced	1,204	269	411	524
Married, spouse absent	1,212	306	373	533
Widowed	210	32	69	109
Living with father only	458	171	157	130
Never married	211	123	62	27
Divorced	97	15	43	39
Married, spouse absent	115	31	40	44
Widowed	35	2	13	20
Percent with one or both parents	100.0%	100.0%	100.0%	100.0%
Living with both parents	37.1	32.4	40.7	38.9
Living with mother only	58.3	62.9	54.6	57.0
Never married	32.3	46.1	29.2	19.6
Divorced	11.9	7.4	12.3	16.8
Married, spouse absent	12.0	8.5	11.1	17.1
Widowed	2.1	0.9	2.1	3.5
Living with father only	4.5	4.7	4.7	4.2
Never married	2.1	3.4	1.8	0.9
Divorced	1.0	0.4	1.3	1.2
Married, spouse absent	1.1	0.9	1.2	1.4
Widowed	0.3	-	0.4	0.6

Note: (-) means sample is too small to make a reliable estimate.

Source: Bureau of the Census, Marital Status and Living Arrangements: March 1995, Current Population Reports,

P20-491, 1996; calculations by New Strategist

Black Homeownership in the 50 Metropolitan Areas with the Most Black Households, 1990

(number of black households, percent of total households that are black, percent of black households that are owner occupied, and median value of black owner-occupied houses, in the U.S. and in the 50 metropolitan areas with the most black households, ranked alphabetically, 1990; numbers in thousands)

			owner-o	ccupied
	number	biack share of total households	percent	median value
Total black households	9,976	10.8%	43.4%	\$50,700
Atlanta, GA	254	24.0	40.4	66.700
Augusta, GA	40	28.2	51.7	47,700
Baltimore, MD	207	23.5	39.4	57,100
Baton Rouge, LA	49	26.1	52.8	45,900
Birmingham, AL	85	24.6	53.3	38,900
Boston, MA	71	6.5	24.7	160,200
Buffalo, NY	43	11.3	34.2	38,500
Charleston, SC	47	26.7	57.1	52,800
Charlotte-Gastonia-Rock Hill, NC-SC	78	17.6	43.8	49,900
Chicago, IL	440	19.8	37.1	64,100
Cincinnati, OH	71	13.0	33.1	54,400
Cleveland, OH	132	18.5	42.2	45,500
Columbia, SC	42	26.0	50.3	53,200
Columbus, OH	58	11.1	38.9	50,400
Dallas, TX	140	14.7	37.9	57,000
Dayton-Springfield, OH	46	12.6	47.3	42,100
Detroit, MI	329	20.3	48.7	29,200
Fort Lauderdale-Hollywood-				
Pompano Beach, FL	59	11.1	44.9	67,300
Fort Worth-Arlington, TX	49	9.9	43.9	47,600
Gary-Hammond, IN	40	18.7	50.8	34,200
Greensboro-Winston-Salem-High Point, NC	6 6	17.7	41.3	53,700
Houston, TX	209	17.6	43.1	43.200
Indianapolis, IN	62	12.9	42.5	41,000
Jackson, MS	62	18.0	50.2	41,500
Jacksonville, FL	52	36.9	54.0	42,100
Kansas City, MO-KS	71	11.7	46.7	37,600
Los Angeles-Long Beach, CA	353	11.8	36.5	143,500
Louisville, KY-IN	46	12.4	42.7	34,800
				(continued)

			owner-o	ccupied
	number	black share of total households	percent	median value
Memphis, TN	129	36.0%	47.9%	\$44,500
Miami-Hialeah, FL	120	17.4	43.7	62,800
Milwaukee, WI	62	11.5	30.3	40,600
Mobile, AL	42	24.3	54.8	38,500
Nashville, TN	54	14.3	41.7	57,100
Nassau-Suffolk, NY	52	6.0	61.5	152,600
New Orleans, LA	141	30.9	40.9	56,300
New York, NY	762	23.4	20.8	159,900
Newark, NJ	141	21.6	30.9	132,400
Norfolk-Virginia Beach-Newport News, VA	132	26.7	42.3	66,300
Oakland, CA	111	14.3	36.7	138,100
Orlando, FL	41	10.3	46.0	59,400
Philadelphia, PA-NJ	316	17.8	55.5	36,200
Pittsburgh, PA	64	7.7	38.9	36,200
Raleigh-Durham, NC	65	22.8	41.4	63,400
Richmond-Petersburg, VA	89	26.8	49.0	57,300
Riverside-San Bernardino, CA	54	6.2	45.5	127,900
San Diego, CA	50	5.7	28.4	129,700
San Francisco, CA	44	6.9	31.5	223,200
St. Louis, MO-IL	144	15.6	45.3	43,800
Tampa-St. Petersburg-Clearwater, FL	63	7.2	45.4	47,000
Washington, DC-MD-VA	371	25.4	41.1	111,700

Source: Bureau of the Census, Housing in Metropolitan Areas—Black Households, Statistical Brief, SB/95-5, 1995; calculations by New Strategist

Income Distribution of Black Households by Household Type, 1996

(number and percent distribution of black households by household income and household type, 1996; households in thousands as of 1997)

	family households				nonfamily households					
				female hh. πο	male hh. no		fema	ale hh	ma	le hh
	total households	total	married couples	spouse present	spouse present	total	totai	living alone	total	living alone
Total households,										
number	12,109	8,455	3,851	3,947	657	3,654	1,985	1,823	1,669	1,303
Under \$10,000	2,794	1,509	157	1,280	73	1,283	840	819	444	396
\$10,000 to \$19,999	2,513	1,691	504	1,059	128	824	452	416	371	328
\$20,000 to \$29,999	1,893	1,259	547	606	107	634	304	257	332	263
\$30,000 to \$39,999	1,512	1,154	608	423	124	359	176	165	184	136
\$40,000 to \$49,999	994	759	422	248	89	235	87	77	147	98
\$50,000 to \$59,999	804	648	460	137	53	154	63	45	93	51
\$60,000 to \$69,999	557	510	407	81	22	47	11	5	36	14
\$70,000 to \$79,999	297	259	201	39	18	40	11	7	29	-
\$80,000 to \$89,999	240	227	179	33	16	13	5	3	8	4
\$90,000 to \$99,999	175	150	127	14	9	26	13	10	12	8
\$100,000 or more	328	290	243	28	19	38	22	14	16	6
Median income	\$23,482	\$27,496	\$42,069	\$16,256	\$30,995	\$15,454 \$	12,434 \$	11,529 \$	20,525 \$	16,447
Total households,										
percent	100.0	% 100.0%	6 100.0%	6 100.0%	6 100.0%	6 100.0%				
Under \$10,000	23.1	17.8	4.1	32.4	11.1	35.1	42.3	44.9	26.6	30.4
\$10,000 to \$19,999	20.8	20.0	13.1	26.8	19.5	22.6	22.8	22.8	22.2	25.2
\$20,000 to \$29,999	15.6	14.9	14.2	15.4	16.3	17.4	15.3	14.1	19.9	20.2
\$30,000 to \$39,999	12.5	13.6	15.8	10.7	18.9	9.8	8.9	9.1	11.0	10.4
\$40,000 to \$49,999	8.2	9.0	11.0	6.3	13.5	6.4	4.4	4.2	8.8	7.5
\$50,000 to \$59,999	6.6	7.7	11.9	3.5	8.1	4.2	3.2	2.5	5.6	3.9
\$60,000 to \$69,999	4.6	6.0	10.6	2.1	3.3	1.3	0.6	0.3	2.2	1.1
\$70,000 to \$79,999	2.5	3.1	5.2	1.0	2.7	1.1	0.6	0.4	1.7	-
\$80,000 to \$89,999	2.0	2.7	4.6	0.8	2.4	0.4	0.3	0.2	0.5	0.3
\$90,000 to \$99,999	1.4	1.8	3.3	0.4	1.4	0.7	0.7	0.5	0.7	0.6
\$100,000 or more	2.7	3.4	6.3	0.7	2.9	1.0	1.1	0.8	1.0	0.5

Note: (-) means sample is too small to make a reliable estimate.

Source: Bureau of the Census, unpublished tables from the 1997 Current Population Survey; calculations by New

Strategist

Black Families below the Poverty Level, 1980 to 1996

(total number of black families, and number and percent below poverty level by type of family and presence of children under age 18 at home, 1980–96; percent change in numbers and rates for selected years; families in thousands as of March the following year)

	te	otal families		ma	nried couple	s	female i	th, no spous	present
		in po	verty		in po	overty		in p	overty
With and with	total	number	percent	total	number	percent	total	number	percent
children under	_	2.207	26.10	2.051	252	0.107	2 047	1,724	43.7%
1996	8,455	2,206	26.1%	3,851	352	9.1%	3,947	,	
1995	8,055	2,127	26.4	3,713	314	8.5	3,769	1,701	45.1
1994	8,093	2,212	27.3	3,842	336	8.7	3,716	1,715	46.2
1993	7,993	2,499	31.3	3,715	458	12.3	3,828	1,906	49.9
1992	7,982	2,484	31.1	3,777	490	13.0	3,738	1,878	50.2
1991	7,716	2,343	30.4	3,631	399	11.0	3,582	1,834	51.2
1990	7,471	2,193	29.3	3,569	448	12.6	3,430	1,648	48.1
1989	7,470	2,077	27.8	3,750	443	11.8	3,275	1,524	46.5
1988	7,409	2,089	28.2	3,722	421	11.3	3,223	1,579	49.0
1987	7,202	2,117	29.4	3,681	439	11.9	3,089	1,577	51.1
1986	7,096	1,987	28.0	3,742	403	10.8	2,967	1,488	50.1
1985	6,921	1,963	28.7	3,680	447	12.2	2,874	1,452	50.5
1984	6,778	2,094	30.9	3,469	479	13.8	2,964	1,533	51.7
1983	6,681	2,161	32.3	3,454	535	15.5	2.871	1,541	53.7
1982	6,530	2,158	33.0	3,486	543	15.6	2,734	1,535	56.2
1981	6,413	1,972	30.8	3,535	543	15.4	2,605	1,377	52.9
1980	6,317	1,826	28.9	3,392	474	14.0	2,634	1,301	49.4
Percent change									
1990-1996	13.2%	0.6%	-11.0%	7.9%	-21.4%	-27.5%	15.1%	4.6%	-9.2%
1980–1996	33.8	20.8	-9.7	13.5	-25.7	-34.7	49.8	32.5	-11.6
								(co	ntinued)

Blacks by Region and Division, 1995 to 2025

(number and percent distribution of blacks and black share of the total population by region and division, selected years 1995–2025; percent change in number and percentage point change in distribution and share, 1995–2005 and 2000–2010; numbers in thousands)

					percei	nt change
	1995	2000	2010	2020	1995-2000	2000-2020
United States	33,134	35,456	40,110	45,075	7.0%	13.1%
Northeast	6,247	6,575	7,300	8,140	5.3	11.0
New England	734	811	982	1,172	10.5	21.1
Middle Atlantic	5,513	5,764	6,318	6,968	4.6	9.6
Midwest	6,197	6,553	7,199	7,866	5.7	9.9
East North Central	5,197	5,449	5,914	6,408	4.8	8.5
West North Central	1,002	1,103	1,285	1,459	10.1	16.5
South	17,495	18,983	21,779	24,575	8.5	14.7
South Atlantic	9,987	10,931	12,675	14,393	9.5	16.0
East South Central	3,184	3,367	3,673	3,957	5.7	9.1
West South Central	4,324	4,685	5,432	6,225	8.3	15.9
West	3,194	3,343	3,831	4,493	4.7	14.6
Mountain	490	601	755	887	22.7	25.6
Pacific	2,704	2,742	3,075	3,606	1.4	12.1
					percentage	point change
	1995	2000	2010	2020	1995-2000	2000-2020
Percent distribution						
United States	100.0%	100.0%	100.0%	100.0%	-	-
Northeast	18.9	18.5	18.2	18.1	-0.4	-0.3
New England	2.2	2.3	2.4	2.6	0.1	0.1
Middle Atlantic	16.6	16.3	15.8	15.5	-0.3	-0.5
Midwest	18.7	18.5	17.9	17.5	-0.2	-0.6
East North Central	15.7	15.4	14.7	14.2	-0.3	-0.7
West North Central	3.0	3.1	3.2	3.2	0.1	0.1
South	52.8	53.5	54.3	54.5	0.7	0.8
South Atlantic	30.1	30.8	31.6	31.9	0.7	0.8
East South Central	9.6	9.5	9.2	8.8	-0.1	-0.3
West South Central	13.1	13.2	13.5	13.8	0.1	0.3
West	9.6	9.4	9.6	10.0	-0.2	0.2
Mountain	1.5	1.7	1.9	2.0	0.2	0.2
Pacific	8.2	7.7	7.7	8.0	-0.5	0.0
						(continued)

(continued from previous pa	8-7				percentage	point change
	1995	2000	2010	2020	1995-2000	2000-2020
Percent share						
United States	12.6%	12.9%	13.5%	14.0%	0.3%	0.6%
Northeast	12.1	12.6	13.6	14.5	0.5	1.0
New England	5.5	6.0	6.9	7.8	0.5	0.9
Middle Atlantic	14.5	15.0	16.0	16.9	0.5	1.0
Midwest	10.0	10.3	10.9	11.5	0.3	0.3
East North Central	12.0	12.3	12.9	13.6	0.3	0.6
West North Central	5.5	5.8	6.4	6.9	0.3	0.6
South	19.0	19.4	20.2	21.0	0.4	0.8
South Atlantic	21.3	21.8	22.9	23.8	0.5	1.1
East South Central	19.8	19.9	20.3	20.8	0.1	0.4
West South Central	15.0	15.3	16.0	16.5	0.3	0.7
West	5.5	5.4	5.4	5.5	-0.1	0.0
Mountain	3.1	3.4	3.7	4.0	0.3	0.3
Pacific	6.4	6.3	6.1	6.1	-0.3	-0.2

Note: (-) means not applicable.

Source: Bureau of the Census, Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2025, PPL-47, 1996; calculations by New Strategist

Blacks by State, 1995 to 2020

numbers in thousands)						nt change
	1995	2000	2010	2020	1995-2000	2000-2010
United States	33,134	35,456	40,110	45,075	7.0%	13.1
Alabama	1,087	1,137	1,227	1,318	4.6	7.9
Alaska	26	29	33	37	11.5	13.8
Arizona	146	177	222	263	21.2	25.4
Arkansas	394	409	434	457	3.8	6.1
California	2,414	2,425	2,702	3,176	0.5	11.4
Colorado	164	196	246	287	19.5	25.5
Connecticut	300	324	384	455	8.0	18.5
Delaware	131	147	169	190	12.2	15.0
District of Columbia	352	321	329	366	-8.8	2.5
Florida	2,078	2,326	2,820	3,318	11.9	21.2
Georgia	2,019	2,279	2,724	3,128	12.9	19.
Hawaii	29	31	35	40	6.9	12.9
Idaho	6	8	12	15	33.3	50.0
Illinois	1,813	1,865	1,971	2,105	2.9	5.1
Indiana	471	502	551	594	6.6	9.8
íowa	56	62	76	86	10.7	22.0
Kansas	158	173	203	234	9.5	17.3
Kentucky	274	287	310	332	4.7	8.0
Louisiana	1,382	1,448	1,600	1,767	4.8	10.5
Maine	5	5	7	8	0.0	40.0
Maryland	1,347	1,489	1,724	1,958	10.5	15.8
Massachusetts	373	417	508	606	11.8	21.
Michigan	1,379	1,435	1,539	1,649	4.1	7.3
Minnesota	127	158	210	257	24.4	32.9
Mississippi	968	1,012	1,078	1,134	4.5	6.3
Missouri	589	628	696	766	6.6	10.3
Montana	3	3	6	6	0.0	100.0
Nebraska	64	72	88	103	12.5	22.3
Nevada	109	138	171	192	26.6	23.9
New Hampshire	8	9	10	14	12.5	11.
New Jersey	1,151	1,239	1,422	1,622	7.6	14.5
New Mexico	41	48	63	79	17.1	31.3
New York	3,192	3,299	3,563	3,885	3.4	8.6
North Carolina	1,598	1,738	1,957	2,151	8.8	12.0
North Dakota	3	5	5	5	66.7	0.0
Ohio	1,250	1,320	1,452	1,590	5.6	10.0
						(continued

					perce	ent change
	1995	2000	2010	2020	1995-2000	2000–2010
Oklahoma	257	282	341	403	9.7%	20.9%
Oregon	56	65	80	93	16.1	23.1
Pennsylvania	1,168	1,224	1,334	1,462	4.8	9.0
Rhode Island	48	54	68	83	12.5	25.9
South Carolina	1,103	1,156	1,255	1,354	4.8	8.6
South Dakota	3	5	6	7	66.7	20.0
Tennessee	853	929	1,057	1,170	8.9	13.8
Texas	2,292	2,543	3,058	3,597	11.0	20.3
Utah	18	22	29	35	22.2	31.8
Vermont	2	2	4	6	0.0	100.0
Virginia	1,298	1,416	1,637	1,862	9.1	15.6
Washington	180	192	224	261	6.7	16.7
West Virginia	57	58	60	64	1.8	3.4
Wisconsin	283	326	400	469	15.2	22.7
Wyoming	3	6	8	8	100.0	33.3

Note: Numbers may not add to total due to rounding.

Source: Bureau of the Census, Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2025, PPL-47, 1996; calculations by New Strategist

Hispanic Americans

Educational Attainment of Hispanics by Ethnicity, 1996

(number and percent distribution of Hispanics aged 25 or older by educational attainment and ethnicity, 1996; numbers in thousands)

	total (Mexican	Puerto Rican	Cuban	Central & South Amer.	other Hispanic
Number						
Total, aged 25 or older	14,541	8,691	1,592	821	2,272	1,165
Not a high school graduate	6,815	4,616	630	297	880	392
High school graduate or more	7,726	4,075	962	524	1,392	773
High school graduate only	3,780	2,181	450	197	599	354
Some college or assoc. degree	2,596	1,332	336	173	486	268
Bachelor's degree or more	1,350	562	176	154	307	151
Bachelor's degree only	967	415	121	93	228	109
Graduate degree	383	147	55	61	79	42
Percent distribution						
Total, aged 25 or older	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Not a high school graduate	46.9	53.1	39.6	36.2	38.7	33.6
High school graduate or more	53.1	46.9	60.4	63.8	61.3	66.4
High school graduate only	26.0	25.1	28.3	24.0	26.4	30.4
Some college or associate's deg	ree 17.9	15.3	21.1	21.1	21.4	23.0
Bachelor's degree or more	9.3	6.5	11.1	18.8	13.5	13.0
Bachelor's degree only	6.7	4.8	7.6	11.3	10.0	9.4
Graduate degree	2.6	1.7	3.5	7.4	3.5	3.6

Source: Bureau of the Census, Internet web site http://www.census.gov; calculations by New Strategist

Health Indicators for Hispanics, 1993 and 1994

(selected indicators of total population and Hispanic health status, and index of Hispanic health indicators to total, 1993 and 1994)

	total population indicator	Hispanic indicator	index
Infant mortality rate (deaths before age 1 per 1,000 live births), 1993	8.4	7.1	85
Total deaths per 100,000 population, 1993	513.3	385.2	75
Motor vehicle crash deaths per 100,000 population, 1993	16.0	16.8	105
Work-related injury deaths per 100,000 people aged 16 or older, 1994	3.3	3.5	106
Suicides per 100,000 population, 1993	11.3	7.3	65
Homicides per 100,000 population, 1993	10.7	17.0	159
Lung cancer deaths per 100,000 population, 1993	39.3	14.5	37
Female breast cancer deaths per 100,000 population, 1993	21.5	12.4	58
Cardiovascular disease deaths per 100,000 population, 1993	181.8	120.4	66
Heart disease deaths per 100,000 population, 1993	145.3	94.8	65
Stroke deaths per 100,000 population, 1993	26.5	19.5	74
Reported incidence of AIDS per 100,000 population, 1994	26.9	44.9	167
Reported incidence of tuberculosis per 100,000 population, 1994	9.4	19.5	207
Reported incidence of syphilis per 100,000 population, 1994	8.1	3.5	43
Prevalence of low birth weight, as percent of total live births, 1994	7.3	6.2	85
Births to girls aged 10 to 17, as percent of total live births, 1994	5.3	7.6	143
Percent of mothers without care, first trimester of pregnancy, 1994	19.8	31.1	157
Percent under age 18 living in poverty, 1994	21.8	41.5	190
Percent living in counties exceeding U.S. air quality standards, 1994	24.9	45.2	182

Note: The index for each indicator is calculated by dividing the Hispanic figure by the total population figure and multiplying by 100. For example, the index of 85 in the first row indicates that Hispanic infant mortality is 15 percent below the rate for all infants.

Source: National Center for Health Statistics, Health Status Indicators by Race and Hispanic Origin, Healthy

People 2000 Review, 1995-96; calculations by New Strategist

Births to Hispanic Women by Age and Ethnicity, 1995

Total births	total 679,768	<i>Mexican</i> 469,615	Puerto Rican 54,824	<i>Cuban</i> 12,473	Central & Sout h Amer. 94,996	other Hispanic 47,860
Under age 15	3,187	2,319	371	11	188	298
Aged 15 to 19	118,449	85,781	12,522	954	9,874	9,318
Aged 20 to 24	208,211	151,485	16,848	2,400	23,554	13,924
Aged 25 to 29	178,258	122,606	12,990	3,642	27,361	11,659
Aged 30 to 34	115,063	72,487	8,172	3,873	22,029	8,502
Aged 35 to 39	49,964	28,937	3,305	1,346	9,881	3,495
Aged 40 or older	9,636	6,000	616	247	2,109	664
Percent distribution by	ethnicity					
Total births	100.0%	69.1%	8.1%	1.8%	14.0%	7.0%
Under age 15	100.0	72.8	11.6	0.3	5.9	9.4
Aged 15 to 19	100.0	72.4	10.6	0.8	8.3	7.9
Aged 20 to 24	100.0	72.8	8.1	1.2	11.3	6.7
Aged 25 to 29	100.0	68.8	7.3	2.0	15.3	6.5
Aged 30 to 34	100.0	63.0	7.1	3.4	19.1	7.4
Aged 35 to 39	100.0	57.9	6.6	2.7	19.8	7.0
Aged 40 or older	100.0	62.3	6.4	2.6	21.9	6.9
Percent distribution by	age					
Total births	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Under age 15	0.5	0.5	0.7	0.1	0.2	0.6
Aged 15 to 19	17.4	18.3	22.8	7.6	10.4	19.5
Aged 20 to 24	30.6	32.3	30.7	19.2	24.8	29.1
Aged 25 to 29	26.2	26.1	23.7	29.2	28.8	24.4
Aged 30 to 34	16.9	15.4	14.9	31.1	23.2	17.8
Aged 35 to 39	7.4	6.2	6.0	10.8	10.4	7.3
Aged 40 or older	1.4	1.3	1.1	2.0	2.2	1.4

Source: National Center for Health Statistics, Advance Report of Final Natality Statistics, 1995, Monthly Vital Statistics Report, Vol. 45, No. 11 Supplement, 1997; calculations by New Strategist

Ethnic Share of Hispanic Births by State, 1995

	total	Mexican	Puerto Rican	Cuban	Central & South Amer.	other Hispanic
United States	100.0%	69.1%	8.1%	1.8%	14.0%	7.0%
Alabama	100.0	63.7	12.1	2.6	14.1	7.4
Alaska	100.0	41.1	9.8	0.7	9.4	39.0
Arizona	100.0	96.2	0.8	0.2	1.7	1.2
Arkansas	100.0	83.4	2.3	0.7	10.0	3.7
California	100.0	85.9	0.8	0.3	10.7	2.3
Colorado	100.0	63.3	1.6	0.3	2.2	32.7
Connecticut	100.0	5.3	69.7	1.5	18.2	5.3
Delaware	100.0	39.7	40.5	0.3	17.4	2.1
District of Columbia	100.0	4.4	2.3	0.6	82.3	10.4
Florida	100.0	19.1	17.0	24.7	33.1	6.1
Georgia	100.0	73.0	7.3	1.6	13.1	5.1
Hawaii	100.0	20.1	30.0	0.4	2.9	46.7
Idaho	100.0	87.8	0.6	0.2	2.5	9.0
Illinois	100.0	81.4	9.6	0.6	2.8	5.7
Indiana	100.0	75.5	10.6	0.8	5.1	8.0
lowa	100.0	78.9	2.7	0.6	8.3	9.3
Kansas	100.0	83.8	2.5	0.5	5.0	8.2
Kentucky	100.0	52.7	15.0	5.7	14.2	12.4
Louisiana	100.0	35.0	14.9	4.7	24.2	21.3
Maine	100.0	22.3	10.7	0.9	13.4	52.7
Maryland	100.0	16.1	7.8	1.6	55.4	19.1
Massachusetts	100.0	4.0	50.3	1.1	39.4	5.2
Michigan	100.0	66.8	8.9	1.4	4.9	17.9
Minnesota	100.0	75.1	3.6	0.5	10.1	10.7
Mississippi	100.0	50.0	7.3	4.5	8.2	30.0
Missouri	100.0	73.1	5.7	1.2	10.2	9.8
Montana	100.0	62.1	2.1	-	2.5	33.3
Nebraska	100.0	78.0	1.1	0.4	9.3	11.2
Nevada	100.0	81.1	2.0	1.9	10.5	4.1
New Hampshire	100.0	22.4	30.4	1.9	7.9	37.4
New Jersey	100.0	11.2	38.4	4.7	43.7	2.0
New Mexico	100.0	33.7	0.3	0.4	0.6	65.0
New York	100.0	11.4	29.8	0.9	44.8	13.2
North Carolina	100.0	69.2	9.7	1.4	13.9	5.7
North Dakota	100.0	56.5	7.5	. 0.7	10.2	25.2
	100.0	45.6	40.9	1.5	5.8	6.2

(continued from previous page)						
	total	Mexican	Puerto Rican	Cuban	Central & South Amer.	other Hispanic
Oklahoma	100.0%	72.3%	3.8%	0.3%	4.0%	19.6%
Oregon	100.0	92.7	0.8	0.3	4.3	1.8
Pennsylvania	100.0	11.6	67.4	1.5	10.1	9.4
Rhode Island	100.0	5.1	31.0	0.8	55.5	7.5
South Carolina	100.0	56.0	14.0	2.1	15.1	12.6
South Dakota	100.0	68.1	6.9	-	12.9	12.1
Tennessee	100.0	56.6	11.5	4.0	9.4	18.5
Texas	100.0	88.8	0.6	0.2	4.7	5.7
Utah	100.0	74.8	1.9	0.6	10.5	12.2
Vermont	100.0	25.9	29.6	7.4	18.5	18.5
Virginia	100.0	19.3	10.2	1.8	50.8	18.0
Washington	100.0	83.7	2.3	0.4	2.6	11.0
West Virginia	100.0	36.7	12.2	1.1	10.0	40.0
Wisconsin	100.0	70.0	20.8	0.6	4.9	3.6
Wyoming	100.0	79.7	1.5	_	3.6	15.1

Note: (-) means no births.

Source: Calculations by New Strategist based on National Center for Health Statistics data in Advance Report of Final Natality Statistics, 1995, Monthly Vital Statistics Report, Vol. 45, No. 11 Supplement, 1997

Projections of Births to Hispanic Women, 1998 to 2020

(number of births to Hispanic women, and Hispanic births as a percent of total births, 1998-2020; numbers in thousands)

	aumber	Hispanic share of total births
1998	654	16.8%
1999	668	17.1
2000	683	17.5
2001	699	17.9
2002	715	18.2
2003	732	18.6
2004	750	18.9
2005	769	19.2
2006	790	19.5
2007	813	19.9
2008	837	20.2
2009	863	20.6
2010	888	20.9
2011	913	21.3
2012	936	21.6
2013	959	21.9
2014	980	22.2
2015	1,001	22.5
2016	1,021	22.8
2017	1,041	23.1
2018	1,060	23.4
2019	1,079	23.7
2020	1,099	24.0

Source: Bureau of the Census, Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2050, Current Population Reports, P25-1130, 1996; calculations by New Strategist

Hispanic Households by Household Type, 1996

(number and percent distribution of Hispanic households by type, 1996; numbers in thousands)

	number	percent
Total households	7,939	100.0%
Family households	6,287	79.2
Married couple families	4,247	53.5
With children under age 18	2,902	36.6
Without children under age 18	1,345	16.9
Female householder, no spouse present	1,604	20.2
With children under age 18	1,283	16.2
Without children under age 18	322	4.1
Male householder, no spouse present	436	5.5
Nonfamily households	1,652	20.8
Female householder	787	9.9
Living alone	667	8.4
Male householder	865	10.9
Living alone	602	7.6

Source: Bureau of the Census, Household and Family Characteristics: March 1996, Current Population Reports, P20-495 (Update), 1997; calculations by New Strategist

Hispanic Households by Age of Householder and Household Type, 1996

(number and percent distribution of Hispanic households by age of householder and household type, 1996; numbers in thousands)

	,		family		nonfamily households		
Total households, number	total 7.939	tata! 6.287	married couples 4.247	female householder no spouse present 1,604	male householder no spouse present 436	female householder 787	male householder 865
Under age 20	110	87	28	30	29	15	9
Aged 20 to 24	639	496	266	163	66	69	75
Aged 25 to 29	964	779	526	202	51	56	129
Aged 30 to 34	1,231	1,068	760	233	75	42	122
Aged 35 to 39	1,154	981	654	278	49	41	132
Aged 40 to 44	954	808	534	231	43	45	101
Aged 45 to 49	670	540	377	132	31	60	70
Aged 50 to 54	511	415	285	101	28	54	43
Aged 55 to 59	425	327	236	59	32	57	42
Aged 60 to 64	383	269	205	54	10	66	47
Aged 65 to 74	609	382	283	86	13	171	56
Aged 75 to 84	220	105	73	27	5	83	32
Aged 85 or older	68	32	20	9	3	29	7
Total households, percent	100.0%	79.2%	53.5%	20.2%	6 5.5%	9.99	6 10.9%
Under age 20	100.0	79.1	25.5	27.3	26.4	13.6	8.2
Aged 20 to 24	100.0	77.6	41.6	25.5	10.3	10.8	11.7
Aged 25 to 29	100.0	80.8	54.6	21.0	5.3	5.8	13.4
Aged 30 to 34	100.0	86.8	61.7	18.9	6.1	3.4	9.9
Aged 35 to 39	100.0	85.0	56.7	24.1	4.2	3.6	11.4
Aged 40 to 44	100.0	84.7	56.0	24.2	4.5	4.7	10.6
Aged 45 to 49	100.0	80.6	56.3	19.7	4.6	9.0	10.4
Aged 50 to 54	100.0	81.2	55.8	19.8	5.5	10.6	8.4
Aged 55 to 59	100.0	76.9	55.5	13.9	7.5	13.4	9.9
Aged 60 to 64	100.0	70.2	53.5	14.1	2.6	17.2	12.3
Aged 65 to 74	0.001	62.7	46.5	14.1	2.1	28.1	9.2
Aged 75 to 84	100.0	47.7	33.2	12.3	2.3	37.7	14.5
Aged 85 or older	100.0	47.1	29.4	13.2	4.4	42.6	10.3

Source: Bureau of the Census, Household and Family Characteristics: March 1996. Current Population Reports, P20-495(Update), 1997; calculations by New Strategist

Hispanic Married Couples by Presence of Children and Age of Householder, 1996

(number and percent distribution of Hispanic married couples by presence and number of own children under age 18 at home and by age of householder, 1996; numbers in thousands)

					age	of househ	older			
	total	< age 20	20-24	25-29	30-34	35-39	40-44	45-54	55-64	65+
Married couples,										
number	4,247	28	266	526	760	654	534	662	441	376
Without children <18	1,515	14	7 9	136	124	69	77	285	366	365
With children <18	2,731	13	187	390	636	585	457	377	75	11
One	896	9	99	150	164	99	129	189	51	6
Two	998	4	67	159	230	213	182	125	13	5
Three or more	837	-	21	82	243	274	145	62	10	
Married couples,										
percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	$\boldsymbol{100.0\%}$	100.0%	100.0%	100.0%
Without children <18	35.7	50.0	29.7	25.9	16.3	10.6	14.4	43.1	83.0	97.1
With children <18	64.3	46.4	70.3	74.1	83.7	89.4	85.6	56.9	17.0	2.9
One	21.1	32.1	37.2	28.5	21.6	15.1	24.2	28.5	11.6	1.6
Two	23.5	14.3	25.2	30.2	30.3	32.6	34.1	18.9	2.9	1.3
Three or more	19.7	_	7.9	15.6	32.0	41.9	27.2	9.4	2.3	-

Note: (-) means sample is too small to make a reliable estimate.

Source: Bureau of the Census, Household and Family Characteristics: March 1996, Current Population Reports, P20-495(Update), 1997; calculations by New Strategist

Region of Residence and Metropolitan Status of Housing Units Occupied by Hispanics, 1995

(number, percent distribution, and percent of housing units occupied by Hispanics, by regional, metropolitan, and homeownership status, 1995; numbers in thousands)

	t	otal		owner			renter	
	number	percent distrib.	number	percent distrib.	percent of total	number	percent distrib.	percent of total
Total occupied								
housing units	7,757	100.0%	3,245	100.0%	41.8%	4,512	100.0%	58.2%
Northeast	1,294	16.7	298	9.1	22.9	996	22.1	77.0
Midwest	510	6.6	262	8.1	51.4	248	5.5	48.6
South	2,686	34.6	1,392	42.9	51.8	1,294	28.7	48.2
West	3,267	42.1	1,293	39.8	39.6	1,973	43.7	60.4
In metropolitan areas	7,037	90.7	2,842	87.6	40.4	4,195	93.0	59.6
In central cities	3,803	49.0	1,228	37.8	32.3	2,576	57.1	67.7
In suburbs	3,234	41.7	1,614	49.7	49.9	1,619	35.9	50.1
Outside metropolitan areas	720	9.3	403	12.4	56.0	317	7.0	44.0

Source: Bureau of the Census, American Housing Survey for the United States in 1995, Current Housing Reports, H150/95, 1997; calculations by New Strategist

Hispanic Homeownership in the 50 Metropolitan Areas with the Most Hispanic Households, 1990

(number of Hispanic households, percent of total households that are Hispanic, percent of Hispanic households that are owner occupied, and median value of Hispanic owner-occupied houses, in the U.S. and in the 50 metropolitan areas with the most Hispanic households, ranked alphabetically, 1990; numbers in thousands)

		Hispanic share of		-occupied
m 4-1 TY	<i>number</i> 6,002	total households 6.5%	percent 42.4%	median value \$77,200
Total Hispanic households	,		42.4 % 59.7	69,500
Albuquerque, NM	58	31.1		•
Anaheim-Santa Ana, CA	121	14.7	39.2	201,200
Austin, TX	47	15.6	39.6	56,300
Bakersfield, CA	36	19.6	43.9	64,600
Bergen-Passaic, NJ	41	8.9	31.5	195,500
Boston, MA	37	3.4	19.1	176,100
Brownsville-Harlingen, TX	53	71.7	60.9	33,500
Chicago, IL	189	8.5	36.7	84,500
Corpus Christi, TX	51	43.4	57.2	40,500
Dallas, TX	95	9.9	38.2	58,100
Denver, CO	66	10.1	47.6	70,500
Detroit, MI	25	1.6	58.8	52,300
El Paso, TX	108	60.3	58.2	50,500
Fort Lauderdale-Hollywood-				
Pompano Beach, FL	35	6.7	54.2	85,000
Fort Worth-Arlington, TX	40	8.1	45.6	50,100
Fresno, CA	59	26.8	40.8	64,900
Houston, TX	187	15.7	39.3	44,200
Jersey City, NJ	60	28.7	20.0	164,500
Laredo, TX	31	90.9	61.3	47,800
Las Cruces, NM	21	47.2	66.0	52,200
Las Vegas, NV	24	8.4	39.0	81,700
Los Angeles-Long Beach, CA	784	26.2	35.1	172,800
McAllen-Edinburg-Mission, TX	79	76.3	68.1	31,200
Miami-Hialeah, FL	320	46.2	48.2	86,700
Middlesex-Somerset-Hunterdon, NJ	20	5.4	40.5	162,100
Modesto, CA	19	15.5	49.0	104,000
Nassau-Suffolk, NY	40	4.7	56.4	164,400
New Orleans, LA	18	3.9	50.9	67,800
New York, NY	584	17.9	12.1	183,300
				(continued)

Income Distribution of Hispanic Households by Household Type, 1996

(number and percent distribution of Hispanic households by household income and household type, 1996; households in thousands as of 1997)

		family households						nontamily households				
				female hh, no	male hh, no		fem	ale hh	ma	le hh		
	total households	totai	married couples	spouse present	spouse present	total	total	living alone	total	living alone		
Total households,												
number	8,225	6,631	4,520	1,617	494	1,593	740	621	854	575		
Under \$10,000	1,415	870	274	550	44	545	329	321	218	196		
\$10,000 to \$19,999	1,894	1,503	919	474	110	393	172	145	221	160		
\$20,000 to \$29,999	1,475	1,235	862	261	111	240	102	72	138	80		
\$30,000 to \$39,999	1,019	881	6 49	144	87	139	53	34	86	62		
\$40,000 to \$49,999	783	674	544	78	52	110	40	25	70	31		
\$50,000 to \$59,999	519	45 3	371	45	35	66	24	15	44	19		
\$60,000 to \$69,999	352	315	278	20	17	37	9	2	29	10		
\$70,000 to \$79,999	250	226	189	25	12	23	4	4	20	8		
\$80,000 to \$89,999	146	136	124	7	7	10	3	2	8	3		
\$90,000 to \$99,999	85	82	66	9	6	3	-	_	3	-		
\$100,000 or more	286	260	245	6	9	26	5	0	21	4		
Median income	\$24,906 \$	27,152 \$	32,379	\$14,535	\$28,322	\$15,705	\$11,770	\$9,746 \$	19,323 \$	14,506		
Total households,												
percent	100.0%	100.0%	100.0%	6 100.0%	100.0%	6 100.0%	6 100.0%	100.0%	100.0%			
Under \$10,000	17.2	13.1	6.1	34.0	8.9	34.2	44.5	51.7	25.5	34.1		
\$10,000 to \$19,999	23.0	22.7	20.3	29.3	22.3	24.7	23.2	23.3	25.9	27.8		
\$20,000 to \$29,999	17.9	18.6	19.1	16.1	22.5	15.1	13.8	11.6	16.2	13.9		
\$30,000 to \$39,999	12.4	13.3	14.4	8.9	17.6	8.7	7.2	5.5	10.1	10.8		
\$40,000 to \$49,999	9.5	10.2	12.0	4.8	10.5	6.9	5.4	4.0	8.2	5.4		
\$50,000 to \$59,999	6.3	6.8	8.2	2.8	7.1	4.1	3.2	2.4	5.2	3.3		
\$60,000 to \$69,999	4.3	4.8	6.2	1.2	3.4	2.3	1.2	0.3	3.4	1.7		
\$70,000 to \$79,999	3.0	3.4	4.2	1.5	2.4	1.4	0.5	0.6	2.3	1.4		
\$80,000 to \$89,999	1.8	2.1	2.7	0.4	1.4	0.6	0.4	0.3	0.9	0.5		
\$90,000 to \$99,999	1.0	1.2	1.5	0.6	1.2	0.2	-	-	0.4	-		
\$100,000 or more	3.5	3.9	5.4	0.4	1.8	1.6	0.7	-	2.5	0.7		

Note: (-) means sample is too small to make a reliable estimate.

Source: Bureau of the Census, unpublished tables from the 1997 Current Population Survey; calculations by New Strategist

Hispanic Families below the Poverty Level, 1980 to 1996

(total number of Hispanic families, and number and percent below poverty level by type of family and presence of children under age 18 at home, 1980–96; percent change in numbers and rates for selected years; families in thousands as of March the following year)

	total families			ma	rried couple	s	female hh, no spouse present		
		in p	overty		in po	overty		in p	overty
	totai	number	percent	total	number	percent	total	number	percent
With and withou	t								
children under a	ge 18								
1996	6,631	1,748	26.4%	4,520	815	18.0%	1,617	823	50.9%
1995	6,287	1,695	27.0	4,247	803	18.9	1,604	792	49.4
1994	6,202	1,724	27.8	4,236	827	19.5	1,485	773	52.1
1993	5,946	1,625	27.3	4,038	770	19.1	1,498	772	51.6
1992	5,733	1,529	26.7	3,940	743	18.8	1,348	664	49.3
1991	5,177	1,372	26.5	3,532	674	19.1	1,261	627	49.7
1990	4,981	1,244	25.0	3,454	605	17.5	1,186	573	48.3
1989	4,840	1,133	23.4	3,395	549	16.2	1,116	530	47.5
1988	4,823	1,141	23.7	3,398	547	16.1	1,112	54 6	49.1
1987	4,576	1,168	25.5	3,196	556	17.4	1,082	565	52.2
1986	4,403	1,085	24.7	3,118	518	16.6	1,032	528	51.2
1985	4,206	1,074	25.5	2,962	505	17.0	980	521	53.1
1984	3,939	991	25.2	2,824	469	16.6	905	483	53.4
1983	3,788	981	25.9	2,752	437	17.7	860	454	52.8
1982	3,369	916	27.2	2,448	465	19.0	767	425	55.4
1981	3,305	792	24.0	2,414	366	15.1	750	39 9	53.2
1980	3,235	751	23.2	2,365	363	15.3	706	362	51.3
Percent change									
1990–1996	33.1%	40.5%	5.6%	30.9%	34.7%	2.9%	36.3%	43.6%	5.4%
1980–1996	105.0	132.8	13.8	91.1	124.5	17.6	129.0	127.3	-0.8
								(cor	ntinued)

	te	otal families		ma	married couples			female hh, no spouse present		
		In pov			in poverty			in p	overty	
With children	total	number	percent	total	number	percent	total	number	percent	
under age 18										
1996	4,689	1,549	33.0%	3,124	687	22.0%	1,274	760	59.7%	
1995	4,422	1,470	33.2	2,902	657	22.6	1,283	735	57.3	
1994	4,377	1,497	34.2	2,923	698	23.9	1.182	700	59.2	
1993	4,153	1,424	34.3	2,747	652	23.7	1,167	706	60.5	
1992	3,962	1,302	32.9	2,692	615	22.9	1,037	598	57.7	
1991	3,621	1,219	33.7	2,445	575	23.5	972	584	60.1	
1990	3,497	1,085	31.0	2,405	501	20.8	921	536	58.2	
1989	3,314	986	29.8	2,309	453	19.6	848	491	57.9	
1988	3,325	988	29.7	2,339	445	19.0	861	510	59.2	
1987	3,201	1,022	31.9	2,197	460	20.9	865	527	60.9	
1986	3,080	949	30.8	_	_	-	822	489	59.5	
1985	2,973	955	32.1	_	-	-	771	493	64.0	
1984	2,789	872	31.3	_	-	-	711	447	62.8	
1983	2,697	867	21.1		_	-	660	418	63.4	
1982	2,458	802	32.6	-	_	-	613	391	63.8	
1981	2,428	692	28.5	_	-	-	622	374	60.0	
1980	2,409	655	27.2	-	-	-	-	-	_	
Percent change										
1990–1996	34.1%	45.4%	6.5%	29.9%	37.1%	5.8%	38.3%	41.8%	2.6%	
1980-1996	94.6	136.5	21.3	_	_	_	_	_	_	

Note: (-) means data not available.

Source: Bureau of the Census, unpublished tables from the 1997 Current Population Survey; calculations by New Strategist

Employment Status of Hispanics by Sex and Age, 1997

(employment status of the civilian noninstitutionalized Hispanic population aged 16 or older, by sex and age, 1997; numbers in thousands)

ana age, 1997;				vilian labor ford	ce		not in	labor force
	total	percent of population	employed	percent of labor force	unemployed	percent of labor force	total	percent of population
Total persons	13,796	67.9%	12,726	92.2%	1,069	7.7%	6,526	32.1%
Aged 16 to 19	911	43.0	714	78.4	197	21.6	1,210	57.0
Aged 20 to 24	2,004	76.4	1,798	89.7	206	10.3	618	23.6
Aged 25 to 34	4,298	79.5	4,029	93.7	269	6.3	1,107	20.5
Aged 35 to 44	3,601	80.9	3,371	93.6	229	6.4	852	19.1
Aged 45 to 54	1,945	75.4	1,846	94.9	99	5.1	636	24.6
Aged 55 to 64	850	53.8	794	93.4	56	6.6	730	46.2
Aged 65 or older	186	11.9	173	93.0	13	7.0	1,372	88.1
Total men	8,309	80.1	7,728	93.0	582	7.0	2,059	19.9
Aged 16 to 19	531	47.4	420	79.1	110	20.7	588	52.6
Aged 20 to 24	1,267	88.1	1,142	90.1	125	9.9	172	11.9
Aged 25 to 34	2,684	93.5	2,547	94.9	137	5.1	188	6.5
Aged 35 to 44	2,091	91.9	1,978	94.6	113	5.4	184	8.1
Aged 45 to 54	1,112	87.8	1,059	95.2	54	4.9	154	12.2
Aged 55 to 64	511	68.4	477	93.3	35	6.8	236	31.6
Aged 65 or older	113	17.3	105	92.9	8	7.1	538	82.7
Total women	5,486	55.1	4,999	91.1	488	8.9	4,466	44.9
Aged 16 to 19	381	38.0	294	77.2	87	22.8	622	62.0
Aged 20 to 24	737	62.3	656	89.0	81	11.0	447	37.7
Aged 25 to 34	1,614	63.7	1,482	91.8	132	8.2	919	36.3
Aged 35 to 44	1,510	69.3	1,393	92.3	117	7.7	668	30.7
Aged 45 to 54	833	63.3	787	94.5	46	5.5	482	36.7
Aged 55 to 64	338	40.6	318	94.1	21	6.2	494	59.4
Aged 65 or older	73	8.1	69	94.5	4	5.5	834	91.9

Note: The civilian labor force equals the number of employed plus the number of unemployed persons. The civilian population equals the number of persons in the labor force plus the number of those not in the labor force. Source: Bureau of Labor Statistics, Employment and Earnings, January 1998; calculations by New Strategist

Hispanic Share of the Total Population by Age, 1995 to 2020

(Hispanics as a percent of the total population by age, selected years 1995-2020)

199 5	1998	2000	2010	2020
10.2%	11.0%	11.4%	13.8%	16.3%
16.0	16.4	16.9	20.4	23.6
13.8	15.6	16.6	19.2	22.5
12.8	13.7	14.5	17.9	21.2
12.6	13.3	13.8	17.9	20.4
13.1	13.8	14.1	16.6	19.9
13.2	13.6	14.2	16.0	19.7
11.6	13.1	13.7	15.6	17.8
9.7	10.9	11.8	14.9	16.6
8.5	9.3	9.9	14.0	16.0
7.5	8.2	8.7	12.1	15.2
7.1	7.4	7.7	10.1	14.3
6.9	7.0	7.2	9.0	12.3
6.3	6.8	7.1	7.9	10.3
5.5	6.2	6.6	7.6	9.3
4.6	5.3	5.8	7.6	8.5
3.8	4.4	4.9		8.4
3.8	3.9	4.2	6.7	8.9
3.6	4.0	4.3	6.1	9.4
13.0	13.6	14.0	16.9	20.0
8.9	9.6	10.0	12.2	14.5
4.5	5.0	5.4	7.2	8.9
	10.2% 16.0 13.8 12.8 12.6 13.1 13.2 11.6 9.7 8.5 7.5 7.1 6.9 6.3 5.5 4.6 3.8 3.8 3.6 13.0 8.9	10.2% 11.0% 16.0 16.4 13.8 15.6 12.8 13.7 12.6 13.3 13.1 13.8 13.2 13.6 11.6 13.1 9.7 10.9 8.5 9.3 7.5 8.2 7.1 7.4 6.9 7.0 6.3 6.8 5.5 6.2 4.6 5.3 3.8 4.4 3.8 3.9 3.6 4.0 13.0 13.6 8.9 9.6	10.2% 11.0% 11.4% 16.0 16.4 16.9 13.8 15.6 16.6 12.8 13.7 14.5 12.6 13.3 13.8 13.1 13.8 14.1 13.2 13.6 14.2 11.6 13.1 13.7 9.7 10.9 11.8 8.5 9.3 9.9 7.5 8.2 8.7 7.1 7.4 7.7 6.9 7.0 7.2 6.3 6.8 7.1 5.5 6.2 6.6 4.6 5.3 5.8 3.8 4.4 4.9 3.8 3.9 4.2 3.6 4.0 4.3 13.0 13.6 14.0 8.9 9.6 10.0	10.2% 11.0% 11.4% 13.8% 16.0 16.4 16.9 20.4 13.8 15.6 16.6 19.2 12.8 13.7 14.5 17.9 12.6 13.3 13.8 17.9 13.1 13.8 14.1 16.6 13.2 13.6 14.2 16.0 11.6 13.1 13.7 15.6 9.7 10.9 11.8 14.9 8.5 9.3 9.9 14.0 7.5 8.2 8.7 12.1 7.1 7.4 7.7 10.1 6.9 7.0 7.2 9.0 6.3 6.8 7.1 7.9 5.5 6.2 6.6 7.6 4.6 5.3 5.8 7.6 3.8 3.9 4.2 6.7 3.6 4.0 4.3 6.1 13.0 13.6 14.0 16.9 8.9 <td< td=""></td<>

Source: Calculations by New Strategist based on Census Bureau data in Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2050, Current Population Reports, P25-1130, 1996

Hispanics by Ethnicity, Age, and Ability to Speak English, 1990

(number and percent of Hispanics aged 5 or older who do not speak English "very well" by ethnicity and age, for the three largest Hispanic ethnic groups and other Hispanics, 1990; numbers in thousands)

sanus)	total	5 to 17	18 to 64	65 to 74	75 or older
Total aged 5 or older, number	7,717	1,450	5,645	378	243
Mexican	4,605	988	3,325	179	113
Puerto Rican	794	169	554	47	24
Cuban	484	2 5	321	79	58
Other Hispanic	1,833	267	1,446	73	47
Total aged 5 or older, percent	39.4%	27.3%	42.7%	56.4%	63.0%
Mexican	38.9	28.1	42.7	52.7	61.3
	33.5	25.5	34.8	62.3	63.7
Puerto Rican	48.6	19.0	46.2	81.1	85.0
Cuban Other Hispanic	41.9	27.0	46.1	46.2	50.0

Source: Bureau of the Census, Persons of Hispanic Origin in the United States, 1990 Census of Population, CP-3-3, 1990; calculations by New Strategist

Ethnic Share of Hispanic Population by State, 1990

(Hispanic ethnic groups as a percent of total Hispanic population, by state, 1990	(Hispanic ethnic	eroups as a percei	it of total Hispanic	population, b	y state, 1990.
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	total Hispani c s	Mexican	Puerto Rican	Cuban	other
United States	100.0%	60.4%	12.2%	4.7%	22.8%
Alabama	100.0	38.6	14.4	5.9	41.0
Alaska	100.0	52.4	10.9	1.6	35.2
Arizona	100.0	89.5	1.2	0.3	9.0
Arkansas	100.0	62.9	5.9	2.5	28.7
California	100.0	79.6	1.6	0.9	17.8
Colorado	100.0	66.6	1.7	0.5	31.2
Connecticut	100.0	3.9	68.9	3.0	24.2
Delaware	100.0	19.5	52.2	4.6	23.7
District of Columbia	100.0	9.1	6.7	3.8	80.4
Florida	100.0	10.3	15.7	42.8	31.2
Georgia	100.0	45.2	16.0	7.2	31.7
Hawaii	100.0	17.7	31.7	0.7	50.0
Idaho	100.0	81.6	1.3	0.3	16.8
Illinois	100.0	69.0	16.1	2.0	12.9
Indiana	100.0	67.6	14.2	1.9	16.4
lowa	100.0	74.7	3.9	1.5	19.9
Kansas	100.0	80.9	3.8	1.5	13.8
Kentucky	100.0	39.5	16.7	4.9	38.8
Louisiana	100.0	25.2	6.6	9.2	58.9
Maine	100.0	31.5	18.3	5.1	45.0
Maryland	100.0	14.7	14.0	5.1	66.2
Massachusetts	100.0	4.4	52.6	2.8	40.2
Michigan	100.0	68.6	9.2	2.6	19.6
Minnesota	100.0	64.4	6.1	2.9	26.7
Mississippi	100.0	42.2	8.2	3.1	46.5
Missouri	100.0	62.0	6.4	3.4	28.1
Montana	100.0	68.7	3.6	1.0	26.7
Nebraska	100.0	80.2	3.1	1.3	15.3
Nevada	100.0	68.5	3.4	4.8	23.2
New Hampshire	100.0	20.8	29.1	5.1	44.9
New Jersey	100.0	3.9	43.3	11.5	41.3
New Mexico	100.0	56.8	0.5	0.2	42.6
New York	100.0	4.2	49.1	3.4	43.4
					(continued)

B39

	total Hispanics	Mexican	Puerto Rican	Cuban	other
North Carolina	100.0%	42.6%	19.1%	4.9%	33.5%
North Dakota	100.0	61.7	8.3	1.4	28.7
Ohio	100.0	41.4	32.8	2.5	23.2
Oklahoma	100.0	73.4	5.4	1.2	20.0
Oregon	100.0	76.0	2.5	1.2	20.4
Pennsylvania	100.0	10.4	64.1	3.2	22.2
Rhode Island	100.0	5.3	28.4	1.8	64.4
South Carolina	100.0	36.1	21.0	5.4	37.5
South Dakota	100.0	65.5	7.2	0.8	26.5
Tennessee	100.0	42.4	13.1	6.1	38.4
Texas	100.0	89.7	1.0	0.4	8.9
Utah	100.0	67.2	2.6	0.5	29.7
Vermont	100.0	19.8	18.0	4.6	57.6
Virginia	100.0	20.6	14.8	3.9	60.7
Washington	100.0	72.6	4.4	1.1	21.9
West Virginia	100.0	33.1	10.6	3.1	53.3
Wisconsin	100.0	61.8	20.5	1.8	15.9
Wyoming	100.0	72.7	1.3	0.2	25.8

Source: Calculations by New Strategist based on Census Bureau data from the 1990 census at Internet web site, http://www.census.gov

Hispanics by State, 1995 to 2020

(number of Hispanics by state, selected years 1995–2020; percent change 1995–2000 and 2000–2010; numbers in thousands)

					perce	nt change
	1995	2000	2010	2020	1995-2000	2000-2010
United States	26,932	31,366	41,138	52,652	16.5%	31.2%
Alabama	32	37	47	57	15.6	27.0
Alaska	25	31	41	54	24.0	32.3
Arizona	868	1,071	1,450	1,846	23.4	35.4
Arkansas	27	33	46	60	22.2	39.4
California	9,206	10,647	14,214	18,757	15.7	33.5
Colorado	507	594	770	959	17.2	29.6
Connecticut	248	288	386	509	16.1	34.0
Delaware	19	25	33	43	31.6	32.0
District of Columbia	37	40	55	70	8.1	37.5
Florida	1,955	2,390	3,319	4,372	22.3	38.9
Georgia	150	189	252	311	26.0	33.3
Hawaii	100	107	132	166	7.0	23.4
Idaho	72	96	140	181	33.3	45.8
Illinois	1,090	1,267	1,637	2,051	16.2	29.2
Indiana	119	140	179	219	17.6	27.9
Iowa	46	54	71	86	17.4	31.5
Kansas	114	138	191	250	21.1	38.4
Kentucky	27	32	42	51	18.5	31.3
Louisiana	105	119	156	201	13.3	31.1
Maine	6	8	14	18	33.3	75.0
Maryland	172	214	300	389	24.4	40.2
Massachusetts	355	437	619	824	23.1	41.6
Michigan	233	261	319	390	12.0	22.2
Minnesota	73	95	132	171	30.1	38.9
Mississippi	19	21	27	33	10.5	28.6
Missouri	74	90	121	155	21.6	34.4
Montana	16	20	28	34	25.0	40.0
Nebraska	50	61	80	100	22.0	31.1
Nevada	192	277	403	519	44.3	45.5
New Hampshire	13	17	22	31	30.8	29.4
New Jersey	896	1,044	1,348	1,682	16.5	29.1
New Mexico	657	736	912	1,121	12.0	23.9
New York	2,541	2,805	3,357	3,982	10.4	19.7
North Carolina	100	121	154	188	21.0	27.3
North Dakota	4	6	10	12	50.0	66.7
					((continued)

	page)				perce	ent change	
	1995	2000	2010	2020	1995–2000	2000-2010	
Ohio	162	183	230	288	13.0%	25.7%	
Oklahoma	104	124	167	220	19.2	34.7	
Oregon	150	195	278	374	30.0	42.6	
Pennsylvania	279	334	448	570	19.7	34.1	
Rhode Island	60	76	112	154	26.7	47.4	
South Carolina	36	42	58	73	16.7	38.1	
South Dakota	7	8	10	12	14.3	25.0	
Tennessee	45	57	75	92	26.7	31.6	
Texas	5,173	5,875	7,421	9,233	13.6	26.3	
Utah	110	138	185	237	25.5	34.1	
Vermont	4	6	8	12	50.0	33.3	
Virginia	209	269	376	482	28.7	39.8	
Washington	284	360	519	700	26.8	44.2	
West Virginia	9	11	17	22	22.2	54.5	
Wisconsin	114	136	173	213	19.3	27.2	
Wyoming	27	35	48	64	29.6	37.1	

Note: Numbers may not add to total due to rounding.

Source: Bureau of the Census, Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2025, Current Population Reports, PPL-47, 1996; calculations by New Strategist

Metropolitan Areas with the Most Hispanics, 1990

(metropolitan areas with at least 100,000 Hispanics ranked by size of Hispanic population; number of Hispanics and Hispanic share of total metropolitan population, 1990; numbers in thousands)

		number	percent
1.	Los Angeles-Riverside-Orange County, CA	4,779	32.9%
2.	New York-Northern New Jersey-Long Island, NY-NJ-CT-PA	2,843	14.7
3.	Miami-Fort Lauderdale, FL	1,062	33.3
4.	San Francisco-Oakland-San Jose, CA	970	15.5
5.	Chicago-Gary-Kenosha, IL-IN-WI	898	10.9
6.	Houston-Galveston-Brazoria, TX	773	20.7
7.	San Antonio, TX	628	47.4
8.	Dallas-Fort Worth, TX	526	13.0
9.	San Diego, CA	511	20.4
10.	El Paso, TX	412	69.6
11.	Phoenix-Mesa, AZ	380	17.0
12.	McAllen-Edinburg-Mission, TX	327	85.2
13.	Fresno, CA	267	35.3
14.	Washington-Baltimore, DC-MD-VA-WV	259	3.9
15.	Denver-Boulder-Greeley, CO	254	12.8
16.	Boston-Brockton-Nashua, MA-NH-ME-CT	239	4.4
17.	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD	224	3.8
18.	Albuquerque, NM	218	37.1
19.	Brownsville-Harlingen-San Benito, TX	213	81.9
20.	Corpus Christi, TX	182	52.0
21.	Austin-San Marcos, TX	1 7 7	20.9
22.	Sacramento-Yolo, CA	172	11.6
23.	Tucson, AZ	163	24.5
24.	Bakersfield, CA	152	28.0
25.	Tampa-St. Petersburg-Clearwater, FL	139	6.7
26.	Laredo, TX	125	93.9
27.	Visalia-Tulare-Porterville, CA	121	38.8
28.	Salinas, CA	120	33.6
29.	Stockton-Lodi, CA	113	23.4
30.	Detroit-Ann Arbor-Flint, MI	105	2.0
31.	Orlando, FL	101	8.2
1			

Source: Bureau of the Census, Statistical Abstract of the United States 1993; calculations by New Strategist

Asian Americans

Educational Attainment of Asians by Ethnicity and Sex, 1990

(total number of Asians aged 25 or older and percent who are high school or college graduates, by ethnicity and sex, 1990; numbers in thousands)

	totai	high school	college
TOTAL			
Total, aged 25 or older	4,316	77.5%	36.6%
Chinese	1,077	73.6	40.7
Filipino	865	82.6	39.3
Japanese	626	87.5	34.5
Asian Indian	464	84.7	58.1
Korean	456	80.2	34.5
Vietnamese	304	61.2	17.4
MEN			
Total, aged 25 or older	2,034	81.5	41.9
Chinese	525	77.2	46.7
Filipino	372	84.2	36.2
Japanese	276	89.9	42.6
Asian Indian	257	89.4	65.7
Korean	186	89.1	46.9
Vietnamese	157	68.5	22.3
WOMEN			
Total, aged 25 or older	2,283	74.0	31.8
Chinese	551	70.2	35.0
Filipino	493	81.4	41.6
Japanese	350	85.6	28.2
Asian Indian	208	79.0	48.7
Korean	269	74.1	25.9
Vietnamese	147	53.3	12.2

Note: Numbers will not add to total because not all ethnicities are shown.

Source: U.S. Bureau of the Census, Asians and Pacific Islanders in the United States, 1990 Census of Population,

1990 CP-3-5, 1993

Bachelor's, Master's, and Doctoral Degrees Earned by Asians by Field of Study, 1994–95

(number and percent of bachelor's, master's, and doctoral degrees earned by Asians, by field of study, 1994–95)

	baci	nelar's	ma	ster's	da	ctoral
	number	percent	number	percent	number	percent
Total degrees	60,478	5.2%	16,842	4.2%	2,690	6.1%
Agriculture and natural resources	424	2.1	129	3.0	71	5.6
Architecture and related programs	704	8.0	282	7.2	4	2.8
Area, ethnic, and cultural studies	558	9.8	86	5.2	5	2.7
Biological and life sciences	7,208	12.9	431	8.0	407	8.8
Business, management, and admin. services	13,174	5.6	4,924	5.2	82	5.9
Communications	1,378	2.9	171	3.3	15	4.7
Communications technologies	16	2.3	14	3.0	_	_
Computer and information sciences	2,425	9.9	1,329	12.9	92	10.4
Construction trades	2	1.8	_	_	_	_
Education	1,381	1.3	1,706	1.7	151	2.2
Engineering	6,939	11.1	2,732	9.6	635	10.4
Engineering-related technologies	714	4.6	46	4.1	2	11.1
English language and literature	1,755	3.4	192	2.4	35	2.2
Foreign languages and literature	591	4.3	112	3.6	33	3.6
Health professions and related sciences	3,563	4.5	1,590	5.1	153	7.4
Home economics	459	3.0	76	2.7	9	2.3
Law and legal studies	66	3.2	59	2.3	1	1.1
Liberal arts and sciences	1,091	3.3	39	1.5	2	2.2
Library science		_	146	2.9	5	9.1
Mathematics	984	7.2	257	6.1	95	7.7
Mechanics and repairers	2	3.0	-	-	-	-
Multi- and interdisciplinary studies	1,478	5.7	75	3.1	14	5.9
Parks, recreation, leisure, fitness	183	1.4	20	1.1	6	4.0
Philosophy and religion	346	4.8	27	2.0	13	2.6
Physical sciences	1,387	7.2	307	5.3	438	9.8
Precision production trades	12	3.4	_	-		
Protective services	420	1.7	33	1.9	3	11.5
Psychology	3,404	4.7	310	2.2	104	2.7
Public administration and services	467	2.5	593	2.5	16	2.9
R.O.T.C. and military sciences	1	3.7	7	5.6	-	-
Social sciences and history	6,626	5.2	485	3.3	196	5.3
Theological studies and religious vocations	151	2.7	230	4.4	51	3.2
Transportation and material moving	101	2.7	18	2.2	_	-
Visual and performing arts	2,468	5.1	416	4.0	52	4.8

Note: (-) means no degrees were awarded.

Source: National Center for Education Statistics, Digest of Education Statistics 1997, NCES 98-015, 1997;

calculations by New Strategist

Health Indicators for Asians, 1993 and 1994

(selected indicators of total population and Asian health status, and index of Asian health indicators to total, 1993 and 1994)

	total population indicator	Asian indicator	index
Infant mortality rate (deaths before age 1 per 1,000 live births), 1993	8.4	5.8	69
Total deaths per 100,000 population, 1993	513.3	295.9	58
Motor vehicle crash deaths per 100,000 population, 1993	16.0	9.5	59
Work-related injury deaths per 100,000 people aged 16 or older, 1994	3.3	2.9	88
Suicides per 100,000 population, 1993	11.3	6.4	57
Homicides per 100,000 population, 1993	10.7	6.4	6 0
Lung cancer deaths per 100,000 population, 1993	39.3	18.5	47
Female breast cancer deaths per 100,000 population, 1993	21.5	9.5	44
Cardiovascular disease deaths per 100,000 population, 1993	181.8	109.7	60
Heart disease deaths per 100,000 population, 1993	145.3	79.0	54
Stroke deaths per 100,000 population, 1993	26.5	24.5	92
Reported incidence of AIDS per 100,000 population, 1994*	26.9	6.6	25
Reported incidence of tuberculosis per 100,000 population, 1994*	9.4	45.3	482
Reported incidence of syphilis per 100,000 population, 1994*	8.1	0.9	11
Prevalence of low birth weight, as percent of total live births, 1994	7.3	6.8	93
Births to girls aged 10 to 17, as percent of total live births, 1994	5.3	2.2	42
Percent of mothers without care, first trimester of pregnancy, 1994	19.8	20.3	103
Percent under age 18 living in poverty, 1994	21.8	-	-
Percent living in counties exceeding U.S. air quality standards, 1994	24.9	44.4	178

 $^{{\}color{red}*}\ Data\ are\ for\ the\ non-Hispanic\ Asian\ population.$

Note: (-) means data are not available. The index for each indicator is calculated by dividing the Asian figure by the total population figure and multiplying by 100. For example, the index of 69 in the first row indicates that Asian infant mortality is 31 percent below the rate for all infants.

Source: National Center for Health Statistics, Health Status Indicators by Race and Hispanic Origin. Healthy People 2000 Review, 1995-96; calculations by New Strategist

Births to Asian Women by State, 1996

(number and percent distribution of Asian births by state, and Asian births as a percent of total births by state, 1996)

	number	percent	Asian share of total births
United States	167,444	100.0%	4.3%
Alabama	577	0.3	0.9
Alaska	400	0.2	3.9
Arizona	1,504	0.9	1.9
Arkansas	338	0.2	0.9
	58,420	34.9	10.8
California	1,575	0.9	2.8
Colorado	•	0.9	2.8
Connecticut	1,227		2.8
Delaware	215	0.1	
District of Columbia	147	0.1	1.8
Florida	3,869	2.3	2.0
Georgia	2,115	1.3	1.8
Hawaii	12,853	7.7	70.1
Idaho	247	0.1	1.3
Illinois	6,043	3.6	3.3
Indiana	920	0.5	1.1
Iowa	748	0.4	2.0
Kansas	894	0.5	2.2
Kentucky	449	0.3	0.9
Louisiana	1,083	0.6	1.6
Maine	145	0.1	1.1
Maryland	2,417	1.4	3.5
Massachusetts	3,548	2.1	4.4
Michigan	2,561	1.5	1.9
Minnesota	2,677	1.6	4.2
Mississippi	376	0.2	0.9
Missouri	1,143	0.7	1.5
Montana	108	0.1	1.0
Nebraska	413	0.2	1.8
Nevada	1,381	0.8	5.3
New Hampshire	161	0.1	1.1
New Jersey	7,166	4.3	6.3
New Mexico	391	0.2	1.4
New York	17,747	10.6	6.5
North Carolina	1,999	1.2	1.9
North Dakota	103	0.1	1.2

(continued)

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	number	percent	Asian share of total births
Ohio	1,959	1.2%	1.3%
Oklahoma	778	0.5	1.7
Oregon	1,655	1.0	3.8
Pennsylvania	3,310	2.0	2.2
Rhode Island	396	0.2	3.2
South Carolina	635	0.4	1.2
South Dakota	96	0.1	0.9
Tennessee	1,020	0.6	1.4
Texas	8,872	5.3	2.7
Utah	1,140	0.7	2.8
Vermont	53	0.0	0.8
Virginia	3,949	2.4	4.3
Washington	5,529	3.3	6.9
West Virginia	141	0.1	0.7
Wisconsin	1,887	1.1	2.8
Wyoming	62	0.0	1.0

Source: National Center for Health Statistics, Births and Deaths: United States, 1996, Monthly Vital Statistics Report, Vol. 46, No. 1, Supplement 2, 1997; calculations by New Strategist

Asian Households by Household Type, 1996

(number and percent distribution of Asian households by type, 1996; numbers in thousands)

	number	percent
Total households	2,777	100.0%
Family households	2,124	76.5
Married-couple families	1,691	60.9
Female householder, no spouse present	258	9.3
Male householder, no spouse present	172	6.2
Nonfamily households	653	23.5
Female householder	319	11.5
Male householder	333	12.0

Source: Bureau of the Census, The Asian and Pacific Islander Population in the United States: March 1996 (Update), detailed tables for Current Population Reports P20-503, PPL-77, 1997; calculations by New Strategist

Asian Households by Household Type and Ethnicity, 1990

(number and percent distribution of Asian households by type of household and ethnicity of householder, 1990; numbers in thousands)

, ,	total	Ohinana	Filinina	lananasa	Asian Indian	Korean	Vietnamese
TOTAL, NUMBER	2,020	Chinese 509	Filipino 356	316	Asian inulan 234	202	141
Family households	1,578	390	293	208	193	163	118
With children under age 18	938	209	176	87	132	102	82
Without children under age 18		181	117	121	61	61	36
, and the second							
Married-couple families	1,295	331	231	174	175	137	85
With children under age 18	816	190	148	76	126	90	65
Without children under age 18	479	141	83	98	49	47	- 20
Female householder,							
no spouse present	186	37	44	25	9	18	19
With children under age 18	94	14	22	8	5	10	12
Without children under age 18	92	23	22	17	4	8	7
Male householder,							
no spouse present	97	22	18	9	9	8	14
Nonfamily households	443	120	63	108	41	39	22
People living alone	325	90	44	88	28	29	14
TOTAL, PERCENT	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Family households	78.1	76.6	82.3	65.8	82.5	80.7	83.7
With children under age 18	46.4	41.1	49.4	27.5	56.4	50.5	58.2
Without children under age 18	31.7	35.6	32.9	38.3	26.1	30.2	25.5
Married-couple families	64.1	65.0	64.9	55.1	74.8	67.8	60.3
With children under age 18	40.4	37.3	41.6	24.1	53.8	44.6	46.1
Without children under age 18	23.7	27.7	23.3	31.0	20.9	23.3	14.2
Female householder,							
no spouse present	9.2	7.3	12.4	7.9	3.8	8.9	13.5
With children under age 18	4.7	2.8	6.2	2.5	2.1	5.0	8.5
Without children under age 18	4.6	4.5	6.2	5.4	1.7	4.0	5.0
Male householder,							
no spouse present	4.8	4.3	5.1	2.8	3.8	4.0	9.9
Nonfamily households	21.9	23.6	17.7	34.2	17.5	19.3	15.6
People living alone	16.1	17.7	12.4	27.8	12.0	14.4	9.9

Note: Numbers by ethnicity will not add to total because not all ethnicities are shown.

Source: Bureau of the Census, Asians and Pacific Islanders in the United States, 1990 Census of Population, 1990 CP-3-5, 1993; calculations by New Strategist

Marital Status of Asians by Sex and Ethnicity, 1990

(number and percent distribution of Asians aged 15 or older by sex, marital status, and ethnicity, 1990; numbers in thousands)

	tota!	Chinese	Filipino	Japanese	Asian Indian	Korean	Vietnamese
Men, number	2,649	656	490	329	322	253	231
Never married	984	234	171	121	101	89	118
Married	1,519	392	286	185	209	153	101
Separated	34	6	8	3	3	3	5
Divorced	79	15	18	14	6	6	5
Widowed	33	9	8	6	3	2	2
Men, percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Never married	37.1	35.7	34.9	36.8	31.4	35.2	51.1
Married	57.3	59.8	58.4	56.2	64.9	60.5	43.7
Separated	1.3	0.9	1.6	0.9	0.9	1.2	2.2
Divorced	3.0	2.3	3.7	4.3	1.9	2.4	2.2
Widowed	1.2	1.4	1.6	1.8	0.9	0.8	0.9
Women, number	2,864	675	610	403	266	340	205
Never married	769	189	164	95	58	81	72
Married	1,709	404	358	241	187	211	108
Separated	50	8	13	5	3	5	6
Divorced	132	22	31	26	6	18	8
Widowed	203	51	43	36	13	24	12
Women, percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Never married	26.9	28.0	26.9	23.6	21.8	23.8	35.1
Married	59.7	59.9	58.7	59.8	70.3	62.1	52.7
Separated	1.8	1.2	2.1	1.2	1.1	1.5	2.9
Divorced	4.6	3.3	5.1	6.5	2.3	5.3	3.4
Widowed	7.1	7.6	7.0	8.9	4.9	7.1	5.9

Note: Numbers by ethnicity will not add to total because not all ethnicities are shown.

Source: Bureau of the Census, Asians and Pacific Islanders in the United States, 1990 Census of Population, 1990 CP-3-5, 1993; calculations by New Strategist

Region of Residence and Metropolitan Status of Housing Units Occupied by Asians, 1995

(number, percent distribution, and percent of housing units occupied by Asians, by regional, metropolitan, and homeownership status, 1995; numbers in thousands)

	to	ital		owner			renter	
	number	percent distrib.	number	percent distrib.	percent of total	number	percent distrib.	percent of total
Total occupied								
housing units	2,430	100.0%	1,295	100.0%	53.3%	1,135	100.0%	46.7%
Home built in past four years	152	6.3	123	9.5	80.9	30	2.6	19.7
Mobile home	17	0.7	12	0.9	70.6	5	0.4	29.4
Northeast	466	19.2	230	17.8	49.4	236	20.8	50.6
Midwest	256	10.5	129	10.0	50.4	127	11.2	49.6
South	406	16.7	217	16.8	53.4	189	16.7	46.6
West	1,302	53.6	719	55.5	55.2	583	51.4	44.8
In metropolitan areas	2,378	97.9	1,264	97.6	52.0	1,114	98.1	45.8
In central cities	1,121	46.1	439	33.9	39.2	682	60.1	60.8
In suburbs	1,257	51.7	825	63.7	65.6	432	38.1	34.4
Outside metropolitan areas	52	2.1	31	2.4	59.6	21	1.9	40.4

Source: Bureau of the Census, American Housing Survey for the United States in 1995, Current Housing Reports, H150/95, 1997; calculations by New Strategist

Asian Homeownership in the 25 Metropolitan Areas with the Most Asian Households, 1990

(number of Asian households, percent of total households that are Asian, percent of Asian households that are owner occupied, and median value of Asian owner-occupied houses, in the U.S. and in the 25 metropolitan areas with the most Asian households, ranked alphabetically, 1990; numbers in thousands)

	As			owner occupied		
	number	Asian share of total households	percent	median value		
Total Asian households	2,014	2.2%	52.2%	\$178,300		
Anaheim-Santa Ana, CA	64	7.7	60.2	256,300		
Atlanta, GA	14	1.3	46.7	98,500		
Bergen-Passaic, NJ	18	3.9	52.8	247,700		
Boston, MA	27	2.5	39.2	203,900		
Chicago, IL	66	3.0	52.6	140,000		
Dallas, TX	20	2.1	43.9	92,300		
Detroit, MI	16	1.0	59.1	111,000		
Honolulu, HI	155	58.5	62.2	274,000		
Houston, TX	36	3.1	55.2	68,100		
Los Angeles-Long Beach, CA	277	9.3	51.3	246,300		
Middlesex-Somerset-Hunterdon, NJ	15	4.2	66.5	194,700		
Minneapolis-St. Paul, MN-WI	15	1.6	41.7	92,500		
Nassau-Suffolk, NY	15	1.7	76.8	224,400		
New York, NY	167	5.1	32.6	220,700		
Newark, NJ	14	2.2	61.2	221,900		
Oakland, CA	77	9.9	61.3	240,600		
Philadelphia, PA	28	1.6	56.1	121,000		
Riverside-San Bernardino, CA	26	3.0	64.6	162,500		
Sacramento, CA	32	5.8	55.4	140,000		
San Diego, CA	48	5.4	53.2	177,200		
San Francisco, CA	96	15.0	50.7	304,100		
San Jose, CA	70	13.4	60.4	282,000		
Seattle, WA	40	5.1	54.7	134,200		
Stockton, CA	14	8.8	47.4	111,600		
Washington, DC-MD-VA	56	3.8	61.1	183,600		
i						

Source: Bureau of the Census. Housing in Metropolitan Areas—Asian or Pacific Islander Households, Statistical Brief, SB/05-6, 1995; calculations by New Strategist

Median Income of Asian Households, 1988 to 1996

(median income of Asian households, and ratio of Asian to total households' median income, 1988–96; percent change in income and ratio, selected years; in 1996 dollars)

	median income	ratio Asian/total
1996	\$43,276	1.22
1995	41,813	1.19
1994	42,858	1.25
1993	41,638	1.23
1992	42,274	1.23
1991	41,989	1.21
1990	46,158	1.28
1989	45,681	1.25
1988	42,795	1.19
Percent change		
1990-1996	-6.2%	-4.7%
1988-1996	1.1	2.5

Note: Ratios are calculated by dividing median income of Asian households by median of total households.

Source: Bureau of the Census, unpublished tables from the 1997 Current Population Survey; calculations by New Strategist

Employment Status of Asians by Sex and Ethnicity, 1990

(employment status of the civilian noninstitutionalized Asian population aged 16 or older, by sex and ethnicity, 1990; numbers in thousands)

	Chinese	Filipino	Japanese	Asian Indian	Korean	Vietnamese
MEN						
Civilian labor force	468	359	242	263	180	160
Employed	447	339	237	251	172	148
Unemployed	21	20	6	12	8	13
Not in labor force	174	99	80	52	65	62
Percent in labor force	72.9%	79.3%	75.5%	83.5%	73.8%	72.3%
Percent unemployed	4.5	5.6	2.4	4.5	4.3	8.0
Percent not in labor force	27.1	20.7	24.5	16.5	26.2	27.7
WOMEN						
Civilian labor force	393	432	221	153	185	111
Employed	373	411	215	141	173	101
Unemployed	20	20	6	12	11	10
Not in labor force	271	166	178	108	148	88
Percent in labor force	59.2%	72.0%	55.4%	58.6%	55.5%	55.8%
Percent unemployed	5.0	4.7	2.7	7.6	6.1	8.9
Percent not in labor force	40.8	27.7	44.5	41.4	44.5	44.2

Note: The civilian labor force equals the number of employed plus the number of unemployed persons. The civilian population equals the number of persons in the labor force plus the number not in the labor force. Source: Bureau of the Census, Asians and Pacific Islanders in the United States, 1990 Census of Population, 1990 CP-3-5, 1993; calculations by New Strategist

Asian Households by Number of Earners, 1996

(number and percent distribution of Asian households by number of earners, 1996; numbers in thousands)

	number	percent
Total households	2,777	100.0%
No earners	392	14.1
One earner	922	33.2
Two or more earners	1,461	52.6
Two earners	1,052	37.9
Three earners	272	9.8
Four or more earners	136	4.9

Source: Bureau of the Census, The Asian and Pacific Islander Population in the United States: March 1996 (Update), detailed tables for Current Population Reports P20-503, PPL-77, 1997; calculations by New Strategist

Non-Hispanic Asians by Age, 1995 to 2020

(number of non-Hispanic Asians by age, selected years 1995–2020; percent change 1995–2000 and 2000–2010; numbers in thousands)

						perce	ent change
	1995	1998	2000	2010	2020	1995-2000	2000-2010
Total persons	8,788	9,856	10,584	14,402	18,557	20.4%	36.1%
Under age 5	773	826	867	1,093	1,381	12.2	26.1
Aged 5 to 9	672	79 0	859	1,072	1,347	27.8	24.8
Aged 10 to 14	716	781	834	1,158	1,427	16.5	38.8
Aged 15 to 19	642	7 69	835	1,166	1,411	30.1	39.5
Aged 20 to 24	694	700	756	1,063	1,385	8.9	40.6
Aged 25 to 29	758	833	836	1,089	1,418	10.3	30.3
Aged 30 to 34	825	862	907	1,052	1,362	9.9	16.0
Aged 35 to 39	800	880	921	1,085	1,338	15.1	17.8
Aged 40 to 44	715	812	873	1,080	1,230	22.1	23.7
Aged 45 to 49	587	687	742	1,013	1,177	26.4	36.5
Aged 50 to 54	415	520	602	898	1,096	45.1	49.2
Aged 55 to 59	322	381	428	745	996	32.9	74.1
Aged 60 to 64	268	309	342	608	875	27.6	77.8
Aged 65 to 69	229	259	278	440	719	21.4	58.3
Aged 70 to 74	174	202	222	331	559	27.6	49.1
Aged 75 to 79	104	133	152	235	368	46.2	54.6
Aged 80 to 84	58	69	79	152	231	36.2	92.4
Aged 85 or older	34	43	51	123	237	50.0	141.2
Aged 18 to 24	939	989	1,081	1,521	1,933	15.1	40.7
Aged 18 or older	6,228	6,978	7,514	10,372	13,539	20.6	38.0
Aged 65 or older	600	70 6	783	1,281	2,113	30.5	63.6

Source: Bureau of the Census, Population Projections of the United States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2050, Current Population Reports, P25-1130, 1996; calculations by New Strategist

Asians by Ethnicity, Age, and Ability to Speak English, 1990

(number and percent of Asians aged 5 or older who do not speak English "very well" by ethnicity and age, for the six largest Asian ethnic groups, 1990; numbers in thousands)

	total	5 to 17	18 to 64	65 to 74	75 or older
Total aged 5 or older, number	2,555	379	1,912	168	96
Chinese	777	90	589	64	34
Filipino	318	32	228	34	24
Japanese	206	21	148	21	17
Korean	376	40	308	20	8
Asian Indian	169	25	133	9	3
Vietnamese	331	67	249	10	5
Total aged 5 or older, percent	38.4%	25.7%	40.4%	56.9%	65.4%
Chinese	50.5	32.6	52.1	73.1	76.8
Filipino	24.2	11.2	24.4	56.6	60.2
Japanese	25.2	18.8	24.5	28.0	53.0
Korean	51.6	22.5	59.5	81.9	85.2
Asian Indian	23.5	14.7	24.9	55.3	59.3
Vietnamese	60.8	44.6	66.1	88.2	87.0

Source: Bureau of the Census, Asians and Pacific Islanders in the United States, 1990 Census of Population, CP-3-5, 1990; calculations by New Strategist

Asians by Region, Division, and Ethnicity, 1990

	totai	Chinese	Filipino	•	Asian Indian	Korean	Vietnamese
UNITED STATES	7,274	1,645	1,407	848	815	799	615
Northeast	1,335	445	143	74	285	182	61
New England	232	72	15	15	36	21	22
Middle Atlantic	1,104	373	128	59	249	161	39
Midwest	768	133	113	63	146	109	52
East North Central	573	103	97	50	123	80	26
West North Central	195	30	17	13	23	29	26
South	1,122	204	159	67	196	153	169
South Atlantic	631	114	108	39	114	101	62
East South Central	84	15	9	9	15	12	10
West South Central	407	76	43	20	67	40	97
West	4,048	863	991	643	189	355	334
Mountain	217	40	32	34	15	28	20
Pacific	3,831	823	960	609	173	327	314
Percent distribution by	region and divi	sion					
UNITED STATES	100.0%	100.0%	100.0%	100.0%	6 100.0%	100.0%	100.09
Northeast	18.4	27.1	10.2	8.7	35.0	22.8	9.9
New England	3.2	4.4	1.1	1.8	4.4	2.6	3.6
Middle Atlantic	15.2	22.7	9.1	7.0	30.6	20.2	6.3
Midwest	10.6	8.1	8.0	7.4	17.9	13.6	8.5
East North Central	7.9	6.3	6.9	5.9	15.1	10.0	4.2
West North Central	2.7	1.8	1.2	1.5	2.8	3.6	4.2
South	15.4	12.4	11.3	7.9	24.0	19.1	27.5
South Atlantic	8.7	6.9	7.7	4.6	14.0	12.6	10.1
East South Central	1.2	0.9	0.6	1.1	1.8	1.5	1.6
West South Central	5.6	4.6	3.1	2.4	8.2	5.0	15.8
West	55.7	52.5	70.4	75.8	23.2	44.4	54.3
TTEST							
Mountain	3.0	2.4	2.3	4.0	1.8	3.5	3.3

Asians by Region and Division, 1995 to 2020

(number and percent distribution of Asians and Asian share of the total population by region and division, selected years 1995–2020; percent change in number and percentage point change in distribution and share, 1995–2000 and 2000–2010; numbers in thousands)

					perce	ent change
	1995	2000	2010	2020	1995–2000	2000-2010
Number						
UNITED STATES	9,348	11,246	15,265	19,650	20.3%	35.7%
Northeast	1,718	2,104	2,894	3,702	22.5	37.5
New England	300	384	558	739	28.0	45.3
Middle Atlantic	1,417	1,721	2,337	2,964	21.5	35.8
Midwest	966	1,215	1,614	1,979	25.8	32.8
East North Central	726	885	1,172	1,435	21.9	32.4
West North Central	261	330	443	545	26.4	34.2
South	1,542	1,902	2,556	3,195	23.3	34.4
South Atlantic	867	1,070	1,445	1,811	23.4	35.0
East South Central	112	138	178	210	23.2	29.0
West South Central	564	692	934	1,173	22.7	35.0
West	5,100	6,022	8,202	10,775	18.1	36.2
Mountain	312	418	566	691	34.0	35.4
Pacific	4,788	5,604	7,634	10,063	17.0	36.2
					percentage p	nint channe
	1995	2000	2010	2020	1995-2000	2000-2010
Percent distribution						
UNITED STATES	100.0%	100.0%	100.0%	100.0%		-
Northeast	18.4	18.7	19.0	18.8	0.3	0.3
New England	3.2	3.4	3.7	3.8	0.2	0.3
Middle Atlantic	15.2	15.3	15.3	15.1	0.1	0.0
Midwest	10.3	10.8	10.6	10.1	0.5	-0.2
East North Central	7.8	7.9	7.7	7.3	0.1	-0.2
West North Central	2.8	2.9	2.9	2.8	0.1	0.0
South	16.5	16.9	16.7	16.3	0.4	-0.2
South Atlantic	9.3	9.5	9.5	9.2	0.2	0.0
East South Central	1.2	1.2	1.2	1.1	0.0	0.0
West South Central	6.0	6.2	6.1	6.0	0.2	-0.1
West	54.6	53.5	53.7	54.8	-1.1	0.2
Mountain	3.3	3.7	3.7	3.5	0.4	0.0
Pacific	51.2	49.8	50.0	51.2	-1.4	0.2
	51.2	.,				

					percentage p	oint change
	1995	2000	20 10	<i>2020</i>	1995-2000	2000-2010
Percent share						
UNITED STATES	3.6%	4.1%	5.1%	6.1%	0.5%	1.0%
Northeast	3.3	4.0	5.4	6.6	0.7	1.4
New England	2.3	2.8	3.9	4.9	0.5	1.1
Middle Atlantic	3.7	4.5	5.9	7.2	0.8	1.4
Midwest	1.6	1.9	2.4	2.9	0.3	0.5
East North Central	1.7	2.0	2.6	3.0	0.3	0.6
West North Central	1.4	1.7	2.2	2.6	0.3	0.5
South	1.7	1.9	2.4	2.7	0.2	0.5
South Atlantic	1.8	2.1	2.6	3.0	0.3	0.5
East South Central	0.7	0.8	1.0	1.1	0.1	0.2
West South Central	2.0	2.3	2.7	3.1	0.3	0.4
West	8.9	9.8	11.6	13.2	0.9	1.8
Mountain	2.0	2.4	2.8	3.1	0.4	0.4
Pacific	11.4	12.8	15.2	16.9	1.4	2.4

Note: Numbers will not add to total due to rounding. (-) means not applicable.

Source: Bureau of the Census, Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2025, Current Population Reports, PPL-47, 1996: calculations by New Strategist

Ethnic Share of Asian Population by State, 1990

	total Asian	Chinese	Filipino	Japanese Asi	an Indian	Korean V	lietnamese
United States	100.0%	22.6%	19.3%	11.7%	11.2%	11.0%	8.4%
Alabama	100.0	18.0	8.3	9.3	19.9	15.8	10.4
Alaska	100.0	6.8	40.4	10.5	2.4	21.1	3.0
Arizona	100.0	25.6	14.3	11.4	10.3	10.6	9.5
Arkansas	100.0	13.8	12.5	7.6	10.6	8.3	18.7
California	100.0	24.8	25.7	11.0	5.6	9.1	9.8
Colorado	100.0	14.5	9.1	19.0	6.4	18.9	12.0
Connecticut	100.0	21.9	10.2	7.5	23.2	10.1	8.1
Delaware	100.0	25.4	14.6	7.6	24.1	13.6	3.8
District of Columbia	100.0	28.0	18.6	9.2	14.3	7.3	6.7
Florida	100.0	19.9	20.7	5.5	20.4	8.0	10.6
Georgia	100.0	16.7	7.7	8.4	18.4	20.2	10.3
Hawaii	100.0	10.0	24.6	36.1	0.1	3.6	0.8
Idaho	100.0	15.2	11.6	29.0	5.1	10.0	6.4
Illinois	100.0	17.5	22.5	7.7	22.5	14.5	3.6
Indiana	100.0	19.6	12.6	12.5	18.9	14.6	6.6
Iowa	100.0	17.4	6.3	6.4	11.9	18.1	11.3
Kansas	100.0	16.8	8.0	6.4	12.5	12.6	20.7
Kentucky	100.0	15.4	12.3	14.1	16.4	16.7	8.5
Louisiana	100.0	13.2	9.1	3.7	12.4	6.7	42.8
Maine	100.0	18.9	15.8	8.8	9.1	12.8	9.6
Maryland	100.0	22.1	13.9	4.7	20.3	21.7	6.3
Massachusetts	100.0	37.5	4.3	6.1	13.8	8.2	10.8
Michigan	100.0	18.2	13.1	10.2	22.7	15.5	5.8
Minnesota	100.0	11.5	5.4	4.6	10.6	14.9	12.1
Mississippi	100.0	19.3	12.0	5.4	14.4	8.6	29.3
Missouri	100.0	20.9	13.6	8.2	14.8	13.9	10.6
Montana	100.0	15.4	17.3	19.5	5.8	15.7	3.7
Nebraska	100.0	14.3	11.1	12.7	9.8	15.6	14.5
Nevada	100.0	17.4	31.6	10.6	4.8	11.3	5.1
New Hampshire	100.0	24.8	9.4	. 8.0	18.2	16.1	5.9
New Jersey	100.0	21.7	19.5	6.3	29.2	14.1	2.7
New Mexico	100.0	18.5	14.3	13.4	11.3	10.4	10.5
New York	100.0	41.0	9.0	5.1	20.3	13.8	2.2
North Carolina	100.0	17.0	10.2	9.7	18.9	13.9	10.0
North Dakota	100.0	16.1	20.5	7.1	13.9	15.2	8.1
Ohio	100.0	21.3	11.3	11.5	22.9	12.3	5.4

	total Asian	Chinese	Filipino	Japanese	Asian Indian	Korean	Vietnamese
Oklahoma	100.0%	15.5%	9.0%	7.1%	13.5%	14.1%	21.8%
Oregon	100.0	19.7	10.7	17.0	5.1	12.5	13.1
Pennsylvania	100.0	21.5	8.8	4.8	20.7	19.5	11.6
Rhode Island	100.0	17.3	10.0	4.1	10.8	7.1	4.2
South Carolina	100.0	13.6	24.7	8.4	17.4	11.5	7.8
South Dakota	100.0	12.3	17.0	9.2	9.2	16.8	8.6
Tennessee	100.0	17.8	9.5	10.8	18.6	14.2	6.5
Texas	100.0	19.8	10.8	4.6	17.5	9.9	21.8
Utah	100.0	15.9	5.7	19.5	4.7	7.9	8.4
Vermont	100.0	21.1	7.9	11.6	16.5	17.5	7.3
Virginia	100.0	13.4	22.0	5.0	12.9	19.0	13.0
Washington	100.0	16.1	20.8	16.3	3.9	14.1	8.9
West Virginia	100.0	15.7	21.5	10.5	26.6	10.4	2.5
Wisconsin	100.0	13.7	6.9	5.2	12.9	10.5	4.7
Wyoming	100.0	19.7	14.5	20.8	8.6	14.3	4.4

Note: Numbers will not add to total because not all ethnicities are shown.

Source: Calculations by New Strategist based on Census Bureau data from the 1990 census at Internet web site,

http://www.census.gov

Distribution of Asians by State, 1995 to 2020

United States	<i>1995</i> 100.0 <i>%</i>	<i>2000</i> 100.0 <i>%</i>	<i>2010</i> 100.0 <i>%</i>	<i>2020</i> 100.0 <i>%</i>
Alabama	0.3	0.3	0.3	0.3
Alaska	0.3	0.4	0.6	0.8
Arizona	0.9	1.0	0.9	0.9
Arkansas	0.2	0.2	0.2	0.2
California	38.8	38.1	39.1	40.7
Colorado	0.9	1.0	1.0	0.9
Connecticut	0.7	0.7	0.8	0.8
Delaware	0.1	0.1	1.0	0.1
District of Columbia	0.2	0.1	0.1	0.1
Florida	2.3	2.4	2.4	2.4
rionda Georgia	1.2	1.3	1.2	1.1
•	8.1	7.1	6.0	5.6
Hawaii daho	0.1	0.2	0.1	0.1
llinois	3.8	3.8	3.6	3.4
indiana	0.5	0.5	0.5	0.5
owa	0.4	0.4	0.4	0.4
Kansas	0.4	0.4	0.4	0.4
Kentucky	0.3	0.3	0.2	0.2
Louisiana	0.6	0.6	0.5	0.5
Maine	0.1	0.1	0.1	0.1
Maryland	2.0	2.0	1.9	1.9
Massachusetts	2.0	2.2	2.4	2.4
Michigan	1.4	1.4	1.4	1.3
Minnesota	1.1	1.2	1.3	1.3
Mississippi	0.2	0.2	0.2	0.2
Missouri	0.6	0.6	0.5	0.5
Montana	0.1	0.1	0.1	0.1
Vebraska	0.2	0.2	0.2	0.2
Nevada	0.7	0.8	0.7	0.7
New Hampshire	0.1	0.1	0.1	0.1
New Jersey	4.0	4.2	4.5	4.5
lew Mexico	0.2	0.3	0.3	0.3
lew York	9.3	9.1	8.9	8.7
Iorth Carolina	0.8	0.9	0.8	0.8
lorth Dakota	0.0	0.1	0.0	0.0
Ohio	1.2	1.2	1.2	1.2

	1995	2000	2010	<i>2020</i>
Oklahoma	0.4%	0.5%	0.4%	0.4%
Oregon	1.0	1.0	1.0	1.0
Pennsylvania	1.9	1.9	1.9	1.9
Rhode Island	0.2	0.2	0.3	0.3
South Carolina	0.3	0.3	0.3	0.3
South Dakota	0.0	0.0	0.0	0.0
Tennessee	0.5	0.5	0.5	0.4
Texas	4.8	5.0	5.0	4.9
Utah	0.5	0.6	0.6	0.5
Vermont	0.0	0.1	0.1	0.1
Virginia	2.3	2.4	2.4	2.4
Washington	3.1	3.2	3.2	3.3
West Virginia	0.1	0.1	0.1	0.1
Wisconsin	0.8	0.9	1.0	1.0
Wyoming	0.0	0.0	0.0	0.1

Source: Calculations by New Strategist based on Census Bureau data in Population Projections for States, by Age, Sex. Race, and Hispanic Origin: 1995 to 2025, Current Population Reports, PPL-47, 1996

Asian Share of State Populations, 1995 to 2020

2020)	199 5	2000	2010	2020	percentage point change 1995—2020
United States	3.6%	4.1%	5.1%	6.1%	2.5
Alabama	0.7	0.8	0.9	1.0	0.4
Alaska	4.6	7.0	12.9	18.9	14.2
Arizona	1.9	2.2	2.6	2.9	1.0
Arkansas	0.6	0.7	0.8	1.0	0.4
California	11.5	13.2	15.9	17.7	6.2
Colorado	2.2	2.6	3.2	3.6	1.4
Connecticut	2.0	2.4	3.4	4.2	2.1
Delaware	1.7	2.0	2.3	2.8	1.2
District of Columbia	3.1	2.9	3.8	4.3	1.3
Florida	1.5	1.8	2.1	2.4	0.9
Georgia	1.6	1.8	2.1	2.4	0.8
Hawaii	63.6	63.3	63.9	65.2	1.6
Idaho	1.1	1.3	1.4	1.5	0.4
Illinois	3.0	3.5	4.3	5.0	2.0
Indiana	0.8	1.0	1.2	1.4	0.6
Iowa	1.2	1.5	2.0	2.3	1.1
Kansas	1.6	1.9	2.2	2.5	0.9
Kentucky	0.6	0.7	0.9	1.0	0.4
Louisiana	1.2	1.4	1.8	2.0	0.8
Maine	0.6	0.7	1.0	1.2	0.6
Maryland	3.7	4.2	5.2	6.1	2.4
Massachusetts	3.1	4.0	5.6	7.1	3.9
Michigan	1.4	1.7	2.2	2.6	1.2
Minnesota	2.3	2.9	3.8	4.6	2.3
Mississippi	0.6	0.7	0.8	1.0	0.4
Missouri	1.0	1.1	1.4	1.5	0.5
Montana	0.6	0.7	0.9	1.0	0.4
Nebraska	1.0	1.3	1.7	2.1	1.0
Nevada	4.0	4.5	5.2	5.8	1.8
New Hampshire	1.0	1.1	1.6	1.9	1.0
New Jersey	4.7	5.8	7.9	9.6	4.9
New Mexico	1.2	1.6	1.9	2.1	0.9
New York	4.8	5.7	7.3	8.8	4.0
North Carolina	1.0	1.2	1.5	1.7	0.7
North Dakota	0.6	0.9	1.0	1.3	0.6
Ohio	1.0	1.2	1.6	2.0	0.9

(continued from previous page)					
	1995	2000	2010	20 20	percentage point change 1995–2020
Oklahoma	1.3%	1.5%	1.8%	2.1%	0.8
Oregon	2.9	3.4	4.1	4.7	1.7
Pennsylvania	1.5	1.8	2.4	3.0	1.5
Rhode Island	2.2	2.8	3.9	5.0	2.8
South Carolina	0.8	0.9	1.0	1.2	0.4
South Dakota	0.5	0.6	0.8	1.1	0.5
Tennessee	0.8	1.0	1.2	1.3	0.5
Texas	2.4	2.8	3.3	3.7	1.3
Utah	2.4	2.8	3.3	3.7	1.3
Vermont	0.7	1.0	1.2	1.5	0.8
Virginia	3.2	3.8	4.9	5.7	2.5
Washington	5.3	6.1	7.4	8.6	3.3
West Virginia	0.5	0.6	0.8	1.0	0.5
Wisconsin	1.4	1.9	2.6	3.3	1.8
Wyoming	0.6	0.8	1.2	1.5	0.9

Source: Calculations by New Strategist based on Census Bureau data in Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1995 to 2020, Current Population Reports, PPL-47, 1996

Metropolitan Areas with the Most Asians, 1990

(metropolitan areas with at least 100,000 Asians ranked by size of Asian population; number of Asians and Asian share of total metropolitan population, 1990; numbers in thousands)

İ		number	percent
1.	Los Angeles-Riverside-Orange County, CA	1,339	9.2%
2.	San Francisco-Oakland-San Jose, CA	927	14.8
3.	New York-Northern New Jersey-Long Island, NY-NJ-CT-PA	898	4.6
4.	Honolulu, HI	526	63.0
5.	Chicago-Gary-Kenosha, IL-IN-WI	258	3.1
6.	Washington-Baltimore, DC-MD-VA-WV	248	3.7
7.	San Diego, CA	198	7.9
8.	Seattle-Tacoma-Bremerton, WA	181	6.1
9.	Boston-Brockton-Nashua, MA-NH-ME-CT	137	2.5
10.	Houston-Galveston-Brazoria, TX	132	3.5
11.	Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD	119	2.0
12.	Sacramento-Yolo, CA	115	7.7

Source: Bureau of the Census, Statistical Abstract of the United States 1993; calculations by New Strategist

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A survey was conducted at five Corps of Engineers (CE) lakes during the spring and summer of 1999 to obtain baseline information about the outdoor recreation style and preferences of these ethnic minority groups (African, Hispanic, and Asian Americans) and their experiences and perceptions at CE projects. This report documents the results of that survey. The study also tested the draft survey instrument against results obtained in four focus group interviews which were conducted in 1998 at the same CE lakes. The 1999 survey population included African Americans at Woodruff Lake, AL, and Carlyle Lake, IL; Hispanic Americans at Canyon Lake, TX, and Pine Flat Lake, CA; and Asian Americans at Hensley Lake, CA, and Pine Flat Lake, CA. The survey was conducted from May 15 to July 30, 1999. While Native Americans were not included in this survey, the report contains a discussion of six focus groups which were conducted during the summer of 1997 with fifteen Native American tribes located in the CE's Tulsa and Omaha Districts.

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298-102